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# *Virginia's Licensed Nursing Workforce: 2010-2012*

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Healthcare Workforce Data Center

October 2012

Virginia Department of Health Professions  
Healthcare Workforce Data Center  
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## Healthcare Workforce Data Center

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### Overview

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The Virginia Department of Health Profession's Healthcare Workforce Data Center (HWDC) collects and disseminates workforce information on Virginia's licensed healthcare practitioners. The 2007 report of the Governor's Health Reform Commission recommended that the HWDC be established within the Department of Health Professions (DHP) due to its existing repository of licensure information for over 80 professions. In the spring of 2008, HWDC was launched with Workforce Investment Act grant funding and continues with support from the Department and shared grant funding from the U.S. Health Resources Services Administration on behalf of the new Virginia Health Workforce Development Authority and other partner organizations.

With significant input and collaborative effort from key stakeholders and experts, HWDC has developed initial supply and demand forecasts for physicians and nurses, published results from existing physician and nursing workforce surveys originally developed by the Board of Medicine and Board of Nursing, updated and launched revised surveys as well as developed new workforce surveys as listed in the "Current Collection" in the HWDC Survey Timetable below. Beginning in winter 2012, HWDC began development of audiology & speech language pathology surveys and long term care administrator surveys which are poised for rollout later this fiscal year.

### HWDC Survey Timetable

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#### In Current Collection:

Medical Doctors  
Doctors of Osteopathy  
Registered Nurses and  
Licensed Practical Nurses  
Certified Nurse Aides  
Physician Assistants  
Nurse Practitioners  
Licensed Professional Counselors  
Clinical Psychologists  
Licensed Clinical Social Workers  
Pharmacists  
Pharmacy Technicians  
Dentists  
Dental Hygienists

#### 2012 Rollout:

Speech-Language Pathologists  
Audiologists  
Long-Term Care Administrators  
Physical Therapists  
Physical Therapy Assistants

#### Proposed:

Occupational Therapists  
Occupational Therapy Assistants

## Methodology

The Nursing Workforce Survey is administered to Licensed Practical Nurses and Registered Nurses through the Department of Health Professions online renewal process. The Board of Nursing has a biennial renewal cycle. A licensee's renewal year depends on his birth year. Those born in even number years renew in even number years, and those born in odd number years renew in odd number years. Licenses expire on the last day of the licensee's birth month during their respective renewal years. Currently, HWDC surveys are only available to those renewing their licenses online. New Virginia licensees and those returning from a long absence did not have access to the online survey.<sup>1</sup> Additionally, paper renewals were available. The survey was not offered to students or new applicants. The survey included those renewing from May 1, 2010 to April 30, 2012. The survey text is available in Appendix C.

## Response Rates

The survey's population is all persons holding nursing licenses in Virginia during the renewal cycle. From this population, we are particularly interested in those who worked or were available to work in Virginia: Virginia's Nursing Workforce. Our sample is a convenience sample of licensed professionals who renewed their licenses and chose to renew online. This method, along with the voluntary efforts of practitioners, results in a good overall response rate (see below).

The methodology excludes some, but not all, nurses first licensed in the Commonwealth during the renewal cycle. Since the renewal cycle is two years long and ongoing, most newly licensed nurses had an opportunity to renew. The number of new licensees in the table above reflects those who did NOT have an opportunity to renew within the renewal cycle.

*This report was made possible by the voluntary effort of 99,345 nurses. Over 80% of nurses who had access to the survey chose to participate.*

| Statistic                             | Licensed Practical Nurses | Registered Nurses | All Nurses |
|---------------------------------------|---------------------------|-------------------|------------|
| Renewing Nurses                       | 30,005                    | 93,985            | 123,990    |
| Non-renewals                          | 3,627                     | 7,826             | 11,453     |
| New Licensees                         | 878                       | 2,390             | 3,268      |
| Total Licensees                       | 34,510                    | 104,201           | 138,711    |
| Completed Surveys                     | 22,303                    | 77,042            | 99,345     |
| Response Rate, All Licensees          | 65%                       | 74%               | 71%        |
| Response Rate, Renewing Practitioners | 74%                       | 82%               | 80%        |

Our methodology also excludes nurses who were scheduled to renew but did not renew their licenses during the renewal period. These nurses left the field of nursing, left the Commonwealth, or renewed late. These nurses may have different patterns of employment than our respondents. The methodology also excludes nurses who choose to renew using paper renewals. These nurses may be older, less technologically savvy or lack access to high speed internet (e.g., rural practitioners).

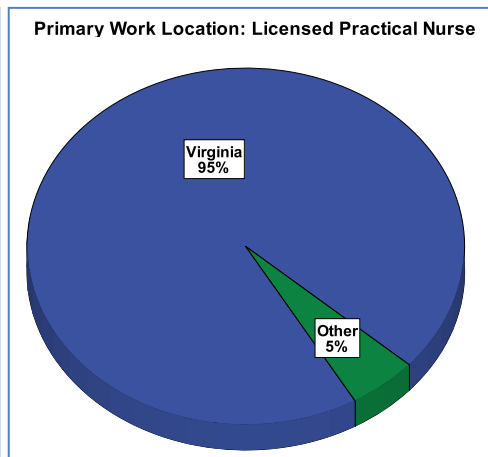
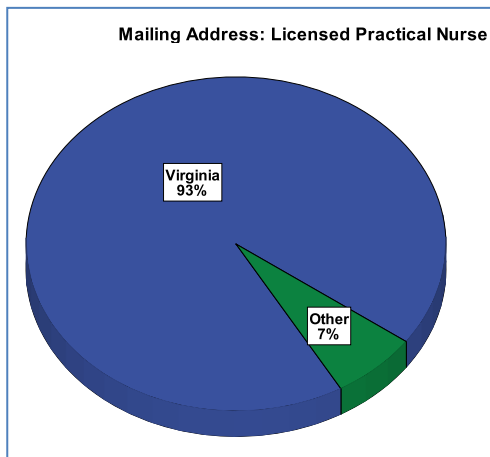
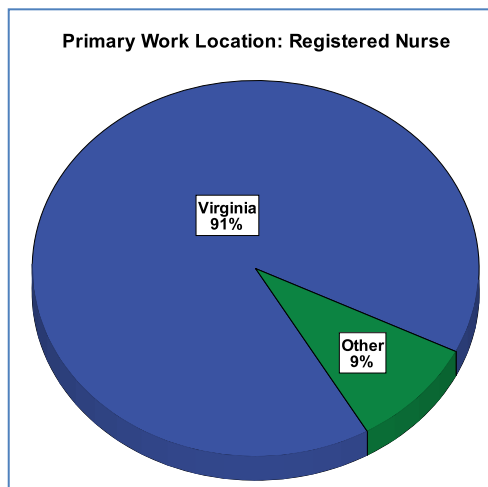
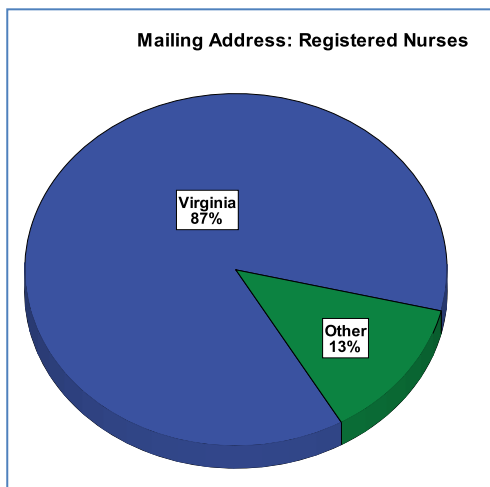
<sup>1</sup> Military personnel may renew within 60 days of returning from an overseas deployment, as long as renewal occurs within five years of license expiration. All others must renew licenses biennially.

## Weighted Estimates

Using administrative data in our licensee files, we are able to determine response rates based on age in five year categories and the rural status of the licensees address of record with the department. We do find statistically significant differences in renewal rates by these variables, with each having a moderate effect on renewal rates.<sup>2</sup> To account for differences in response rates by these key characteristics this report uses weighted estimates. The HWDC assigns a weight to each response based on the overall response rate of nurses based on two characteristics: 1) the age of the respondent, in five year categories, and, 2) the rural status of the respondent's mailing address.

For the latter, the HWDC uses a measure of rurality developed by the US Department of Agriculture known as the Rural-Urban Continuum Code. More information on these codes is available on the USDA website here: <http://www.ers.usda.gov/Briefing/Rurality/RuralUrbCon/>. Response rates may vary on other important characteristics such as race/ethnicity, gender, specialty or worksite characteristics. However, the HWDC does not have population level data on these characteristics to generate response rates and weights. For information on weights, see Appendix A. Due to the rounding of weighted data in HWDC's statistical software, weighting may result in some minor anomalies in tables and other presented data (e.g., data may not add totals in tables).

## Virginia's Licensed Nurses



Not all of Virginia's licensed nurses live or work in the state. Out-of-state nurses maintain licenses in-state for a variety of reasons. Those serving in the military or working for the federal government must maintain a license, but they may do so in any state. Retired nurses may maintain their licenses for prestige or occasional practice. Nurses may consult or occasionally travel to Virginia to care for their patients, particularly those practicing in Virginia's border jurisdictions.

Compared to other professions, a large proportion of nurses (88.6%) have mailing addresses in Virginia, including 87 percent of Registered Nurses and 93 percent of Licensed Practical Nurses. A similarly large proportion (91.6%) of those who reported a primary work location reported it being in Virginia. This includes 91 percent of RNs and 95% of LPNs.

<sup>2</sup> For Age in 5-year categories,  $\chi^2$  is significant at the 99% confidence level for both professions, with Cramer's V of 0.254 (RNs) and 0.204 (LPNs) indicating moderate effect size. For Rural Urban Continuum,  $\chi^2$  is also significant at the 99% confidence level with Cramer's V of 0.244 (RNs) and 0.131 (LPNs), indicating a moderate effect size.



## Virginia's Nursing Workforce

Virginia's nursing workforce consists of respondents who reported working and who identified at least one practice location in Virginia. If a respondent indicated practicing but did not list a location, state of residence or mailing address was used as a proxy to determine participation in Virginia's workforce. Virginia's workforce also includes those who reside in Virginia and are not working, but who intend to return to the workforce at some point. We include nurses who are working in a non-nursing position as part of Virginia's nursing workforce. Some respondents hold more than one license and were able to respond to the survey twice, creating duplicate responses. We kept duplicate surveys if the respondent indicated working under the relevant license. The other duplicate was removed. Those familiar with federal data should note that this is a broader measure than the Bureau of Labor Statistics' civilian labor force which includes only those who are employed or those who are actively seeking work and excludes those in the military.

*106,473 nurses participated in Virginia's Nursing Workforce during the survey period, including 27,762 Licensed Practical Nurses, and 78,711 Registered Nurses.*

Using these criteria and weighted responses, the HWDC estimates that 106,473 nurses participated in Virginia's Nursing Workforce during the survey period, including 27,762 licensed practical nurses and 78,711 registered nurses. Approximately 77 percent of nurses who held a license in Virginia during this period participated in Virginia's nursing workforce.

| Statistic   | Licensed Practical Nurses | Registered Nurses | Total          |
|---|---------------------------|-------------------|----------------|
| Working in Virginia                                       | 24,806                    | 73,169            | 97,975         |
| Not working, plans to return to work, resides in Virginia | 3,105                     | 5,545             | 8,650          |
| <b>Total</b>  | <b>27,911</b>             | <b>78,714</b>     | <b>106,625</b> |
| Removed duplicate   | 149                       | 3                 | 152            |
| <b>Virginia's Nursing Workforce</b>                       | <b>27,762</b>             | <b>78,711</b>     | <b>106,473</b> |
| Licensees   | 34,510                    | 104,201           | 138,711        |
| Proportion of Licensees in Virginia's Nursing Workforce   | 80%                       | 76%               | 77%            |

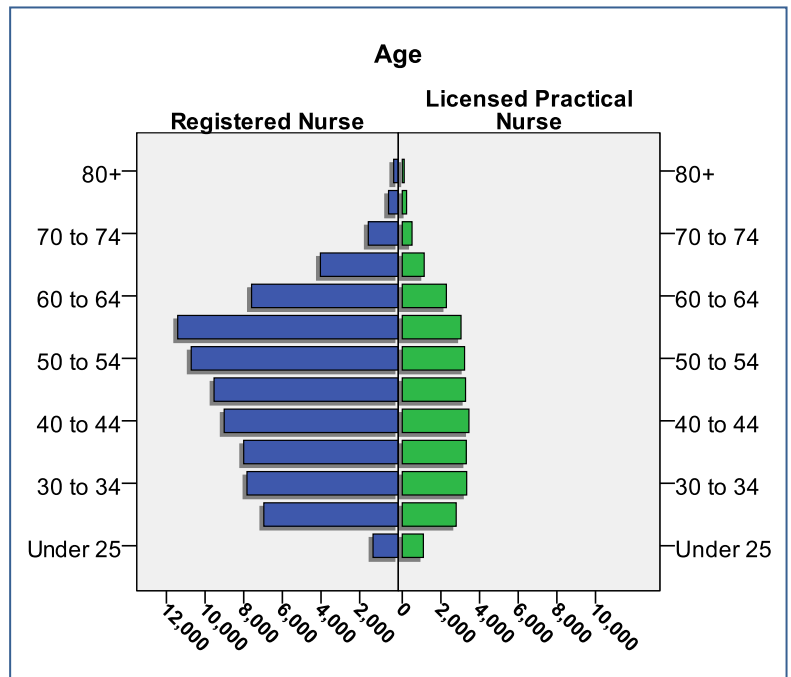
# Virginia's Nursing Workforce

## Demographics

### Age & Gender

The median age of Virginia's Nursing Workforce, as of January 1, 2012, was 47. For registered nurses, the median age was 48, while the median age for licensed practical nurses was 44. Less than 31 percent of nurses were age 55 or over, while 32.6 percent were under age 40. Roughly the same proportion of RNs were under age 40 as were over age 55, while a larger proportion of LPNs were under age 40 (38%) than over age 55 (26.3%).

There were very few males in Virginia's nursing workforce. Only 5.6 percent of Virginia's nurses were male, including about 5.8 percent of RNs and 4.8% of LPNs. The proportion of males peaks at just under seven percent in the 35 to 44 age range. Only 4.7 percent of nurses between the age of 25 to 29 are male.



### License Transaction Rate by Age (Unweighted, All Nurses)

For all age categories, a slightly larger proportion of RN licensees renew their licenses than LPNs. Renewal rates are lower for nurses under age 40, especially considering this population has the largest share of newly issued licenses. Renewal rates begin to decline significantly after age 60.

| Age             | Registered Nurse |                   |           | Licensed Practical Nurse |                   |           |
|-----------------|------------------|-------------------|-----------|--------------------------|-------------------|-----------|
|                 | Renewed          | Allowed to expire | New Issue | Renewed                  | Allowed to expire | New Issue |
|                 | %                | %                 | %         | %                        | %                 | %         |
| <b>Under 25</b> | 72%              | 4%                | 24%       | 80%                      | 6%                | 14%       |
| <b>25 to 29</b> | 86%              | 8%                | 6%        | 83%                      | 12%               | 5%        |
| <b>30 to 34</b> | 86%              | 9%                | 5%        | 83%                      | 12%               | 5%        |
| <b>35 to 39</b> | 90%              | 8%                | 2%        | 87%                      | 11%               | 3%        |
| <b>40 to 44</b> | 91%              | 6%                | 3%        | 88%                      | 10%               | 3%        |
| <b>45 to 49</b> | 93%              | 6%                | 1%        | 89%                      | 9%                | 1%        |
| <b>50 to 54</b> | 93%              | 6%                | 1%        | 90%                      | 9%                | 1%        |
| <b>55 to 59</b> | 94%              | 5%                | 1%        | 92%                      | 8%                | 1%        |
| <b>60 to 64</b> | 92%              | 7%                | 1%        | 89%                      | 10%               | 1%        |
| <b>65 to 69</b> | 89%              | 11%               | 0%        | 86%                      | 14%               | 0%        |
| <b>70 to 74</b> | 84%              | 16%               | 0%        | 80%                      | 20%               | 0%        |
| <b>75 to 79</b> | 78%              | 22%               | 0%        | 77%                      | 23%               | 0%        |
| <b>80 +</b>     | 70%              | 30%               | 0%        | 66%                      | 34%               | 0%        |
| <b>Total</b>    | <b>90%</b>       | <b>8%</b>         | <b>2%</b> | <b>87%</b>               | <b>11%</b>        | <b>3%</b> |

| Race/ Ethnicity                          | Est. 2011 Virginia Population |     | Registered Nurses |       | Licensed Practical Nurses |       | All Nurses        |       | All Nurses under 40 |       |
|--|-------------------------------|-----|-------------------|-------|---------------------------|-------|-------------------|-------|---------------------|-------|
|  |                               | %   | Weighted Estimate | %     | Weighted Estimate         | %     | Weighted Estimate | %     | Weighted Estimate   | %     |
| <b>Hispanic of any race</b>              | 660,730                       | 8%  | 1,105             | 1.4%  | 421                       | 1.5%  | 1,526             | 1.4%  | 759                 | 2.2%  |
| <b>White, non-Hispanic</b>               | 5,222,122                     | 64% | 63,596            | 81.7% | 17,725                    | 64.6% | 81,321            | 77.2% | 24,877              | 72.1% |
| <b>Black, non-Hispanic</b>               | 1,548,069                     | 19% | 7,493             | 9.6%  | 8,061                     | 29.4% | 15,554            | 14.8% | 5,911               | 17.1% |
| <b>American Indian or Alaskan Native</b> | 21,474                        | 0%  | 173               | 0.2%  | 77                        | 0.3%  | 249               | 0.2%  | 66                  | 0.2%  |
| <b>Asian or Pacific Islander</b>         | 463,913                       | 6%  | 4,038             | 5.1%  | 521                       | 1.9%  | 4,560             | 4.3%  | 1,866               | 5.4%  |
| <b>Other Race<sup>4</sup></b>            | -                             | -   | 553               | 0.7%  | 193                       | 0.7%  | 746               | 0.7%  | 287                 | 0.8%  |
| <b>Two or more races</b>                 | 180,296                       | 2%  | 895               | 1.1%  | 433                       | 1.6%  | 1,329             | 1.3%  | 747                 | 2.2%  |

Percentages many not add to 100% due to rounding.

Although non-Hispanic whites accounted for 65 percent of Virginia’s population, they accounted for more than three-quarters of Virginia’s nurses. All other major racial/ethnic groups were underrepresented in the nursing profession with respect to the general population. However, underrepresented groups were making gains in younger cohorts. Hispanics, non-Hispanic blacks and Asian/Pacific Islanders all made gains among nurses under age 40. Nevertheless, Hispanics remain significantly underrepresented even among nurses under age 40.

With respect to specific professions, non-Hispanic whites represented a far larger percentage of registered nurses than licensed practical nurses. In fact, the number of non-Hispanic whites who are licensed practical nurses is proportionate to the overall population, but they are overrepresented among registered nurses. Meanwhile, non-Hispanic blacks, who are overrepresented as licensed practical nurses compared to the overall population, are significantly underrepresented among registered nurses. Hispanics and all other racial/ethnic groups are underrepresented among both registered nurses and licensed practical nurses.

<sup>3</sup> All Healthcare Workforce Data Surveys follow Federal OMB standards for data collection on race and ethnicity. This allows valid comparisons with data collected by the US Census Bureau and other sources. For more information on these standards see: [http://www.whitehouse.gov/omb/inforeg\\_statpolicy](http://www.whitehouse.gov/omb/inforeg_statpolicy).

<sup>4</sup> The U.S. Census Bureau no longer provides an estimate for people included in the “Other Race” category in 2011. Instead, people who select this category are reallocated into another racial group.

### Prior Experience

Most nurses had prior experience in a job related to health care before they began their training. However, among those nurses that did have a prior job in the health care industry, a majority were nursing aides or assistants. The only other jobs that were cited by more than one percent of all nurses were home health aides/assistants, licensed practical nurses, EMTs/paramedics and medical assistants. Percentages were consistent across both nursing professions. It should be noted that some nurses had prior experience in multiple categories. Therefore, it is possible that the total number of responses across professions will be greater than the total number of nurses in that profession.

*Over half of Virginia's nurses had some health care experience before entering the nursing profession*

| Prior Experience              | Registered Nurses |              | Licensed Practical Nurses |               | All Nurses |                 |
|-------------------------------|-------------------|--------------|---------------------------|---------------|------------|-----------------|
|                               | Number            | % of All RNs | Number                    | % of All LPNs | Number     | % of All Nurses |
| <b>Nursing Aide/Assistant</b> | 26,394            | 34%          | 10,643                    | 38%           | 37,037     | 35%             |
| <b>LP Nurses (for RNs)</b>    | 7,712             | 10%          | 0 <sup>5</sup>            | 0%            | 7,712      | 7%              |
| <b>Other</b>                  | 5,643             | 7%           | 1,504                     | 5%            | 7,147      | 7%              |
| <b>Home Health Aide/Asst.</b> | 2,544             | 3%           | 2,151                     | 8%            | 4,695      | 4%              |
| <b>EMT/Paramedic</b>          | 2,920             | 4%           | 655                       | 2%            | 3,575      | 3%              |
| <b>Medical Assistant</b>      | 1,966             | 2%           | 1,013                     | 4%            | 2,979      | 3%              |
| <b>Military Medical Corp</b>  | 822               | 1%           | 330                       | 1%            | 1,152      | 1%              |
| <b>Allied Health Tech.</b>    | 943               | 1%           | 180                       | 1%            | 1,123      | 1%              |
| <b>Dental Assistant</b>       | 855               | 1%           | 229                       | 1%            | 1,084      | 1%              |
| <b>Health Care Manager</b>    | 710               | 1%           | 164                       | 1%            | 874        | 1%              |
| <b>Medical Doctor</b>         | 80                | 0%           | 49                        | 0%            | 129        | 0%              |
| <b>Midwife</b>                | 59                | 0%           | 22                        | 0%            | 81         | 0%              |
| <b>Total with Experience*</b> | 41,451            | 53%          | 14,980                    | 54%           | 56,431     | 53%             |

\*Respondents were able to make multiple selections.

<sup>5</sup> 1,671 licensed practical nurses stated that "Licensed Practical Nurse (for RNs)" was part of their prior experience. These responses were removed from this analysis.

## Domestic Nursing Education Location

Nearly three-quarters of nurses received their most recent nursing education in the state of Virginia. Only seven percent of all nurses received their education in a border state, while 20 percent received their education in a state that did not border Virginia.<sup>6</sup> Licensed practical nurses were more likely to have received education in Virginia, while registered nurses were more likely to have received their education outside of the state.

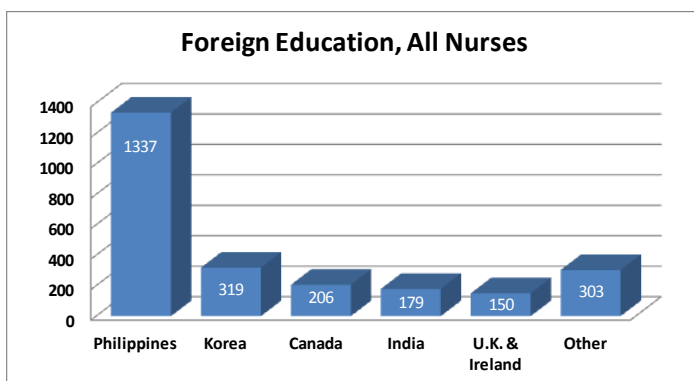
*Almost three-quarters of all nurses had their most recent nursing education in Virginia, including 68% of RNs and 85% of LPNs*

| State             | Registered Nurses |             | Licensed Practical Nurses |             | All Nurses    |             |
|-------------------|-------------------|-------------|---------------------------|-------------|---------------|-------------|
|                   | Number            | %           | Number                    | %           | Number        | %           |
| Virginia          | 47,057            | 68%         | 20,767                    | 85%         | 67,824        | 73%         |
| Border States     | 6,042             | 9%          | 907                       | 4%          | 6,949         | 7%          |
| Non-Border States | 15,803            | 23%         | 2,729                     | 11%         | 18,532        | 20%         |
| <b>Total</b>      | <b>68,902</b>     | <b>100%</b> | <b>24,403</b>             | <b>100%</b> | <b>93,305</b> | <b>100%</b> |

## Foreign Nursing Education Locations

Only 2,494 nurses were estimated to have received nursing education in a foreign country, almost all of whom were registered nurses.<sup>7</sup> The majority of those nurses received their education in the Philippines. Korea, Canada, India, and the United Kingdom/Republic of Ireland were also notable sources of education for RNs.

| Country                  | Registered Nurses |              | Licensed Practical Nurses |               | All Nurses  |                 |
|--------------------------|-------------------|--------------|---------------------------|---------------|-------------|-----------------|
|                          | Number            | % of All RNs | Number                    | % of All LPNs | Number      | % of All Nurses |
| Philippines              | 1331              | 1.69%        | 6                         | 0.02%         | 1337        | 1.26%           |
| Korea                    | 317               | 0.40%        | 2                         | 0.01%         | 319         | 0.30%           |
| Canada                   | 203               | 0.26%        | 3                         | 0.01%         | 206         | 0.19%           |
| India                    | 179               | 0.23%        | 0                         | 0.00%         | 179         | 0.17%           |
| United Kingdom & Ireland | 145               | 0.18%        | 5                         | 0.02%         | 150         | 0.14%           |
| Other                    | 264               | 0.34%        | 39                        | 0.14%         | 303         | 0.28%           |
| <b>Total</b>             | <b>2439</b>       | <b>3.10%</b> | <b>55</b>                 | <b>0.20%</b>  | <b>2494</b> | <b>2.34%</b>    |



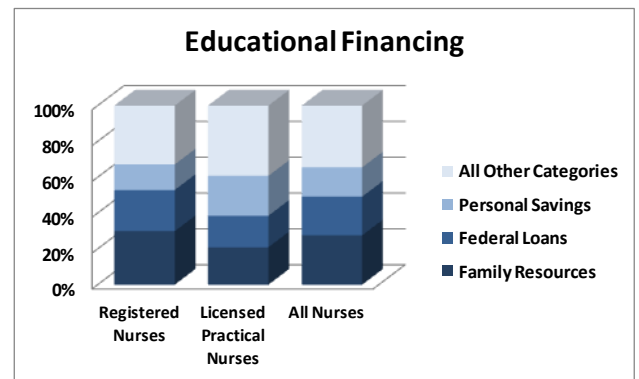
<sup>6</sup> Non-border states included all states that do not share a common border with Virginia, while border states included the five states – Maryland, West Virginia, Kentucky, Tennessee and North Carolina – that border Virginia and the District of Columbia.

<sup>7</sup> There was no uniform standard by which countries were included in the sample. Therefore, some discretion was used in deciding which data points would be included in this sample.

## Education Financing

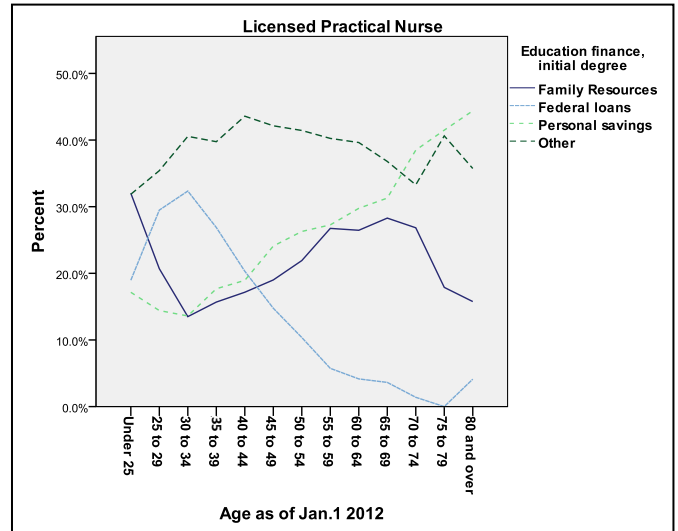
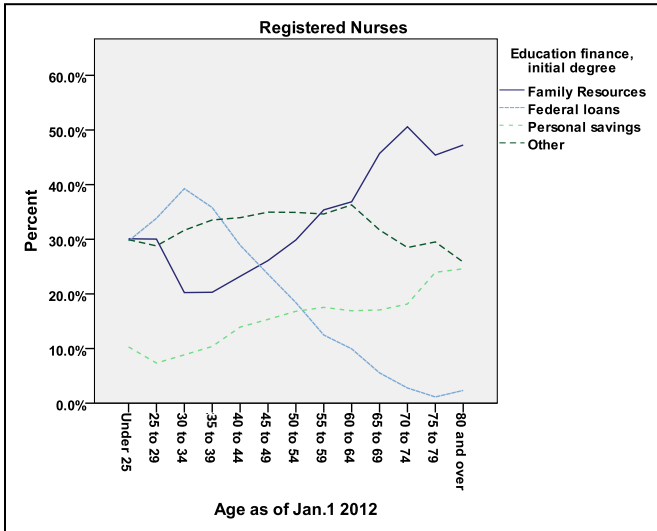
Nurses financed their education using a variety of methods, but the three most popular methods were family resources, federal loans and personal savings. Two-thirds of all nurses used one of these three methods to finance their education. Among the other one-third of nurses, no particular financing method was preferred. In fact, financing methods were fairly evenly distributed among the other nine financing methods included in the survey.

Registered nurses were more likely to use family resources and federal loans to finance their education, while licensed practical nurses were more likely to use personal savings. Personal savings were the most common way for licensed practical nurses to finance their education. More than half of registered nurses used family resources or federal loans – personal savings was a distant third on the list.



| Finance Method                                     | Registered Nurses |      | Licensed Practical Nurses |      | All Nurses |      |
|--|-------------------|------|---------------------------|------|------------|------|
|  | Number            | %    | Number                    | %    | Number     | %    |
| <b>Family Resources</b>                            | 23,285            | 30%  | 5,747                     | 21%  | 29,032     | 28%  |
| <b>Federal Loans</b>                               | 17,969            | 23%  | 4,838                     | 18%  | 22,807     | 22%  |
| <b>Personal Savings</b>                            | 11,125            | 14%  | 6,113                     | 22%  | 17,238     | 16%  |
| <b>State/Local Government Scholarship or Grant</b> | 4,207             | 5%   | 2,204                     | 8%   | 6,411      | 6%   |
| <b>Federal Traineeship, Scholarships, or Grant</b> | 4,093             | 5%   | 1,603                     | 6%   | 5,696      | 5%   |
| <b>Other Resources</b>                             | 2,509             | 3%   | 2,302                     | 8%   | 4,811      | 5%   |
| <b>Other Type of Loan</b>                          | 3,511             | 5%   | 1,273                     | 5%   | 4,784      | 5%   |
| <b>Employer Tuition Reimbursement</b>              | 3,210             | 4%   | 657                       | 2%   | 3,867      | 4%   |
| <b>Healthcare Employment Earnings</b>              | 2,420             | 3%   | 1,035                     | 4%   | 3,455      | 3%   |
| <b>Non-Healthcare Employment Earnings</b>          | 1,956             | 3%   | 743                       | 3%   | 2,699      | 3%   |
| <b>Non-Governmental Scholarship or Grant</b>       | 2,057             | 3%   | 495                       | 2%   | 2,552      | 2%   |
| <b>Veterans Benefits</b>                           | 1,666             | 2%   | 467                       | 2%   | 2,133      | 2%   |
| <b>Total</b>                                       | 78,008            | 100% | 27,477                    | 100% | 105,485    | 100% |

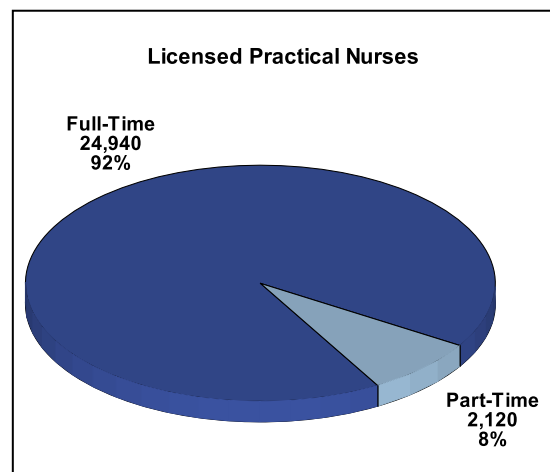
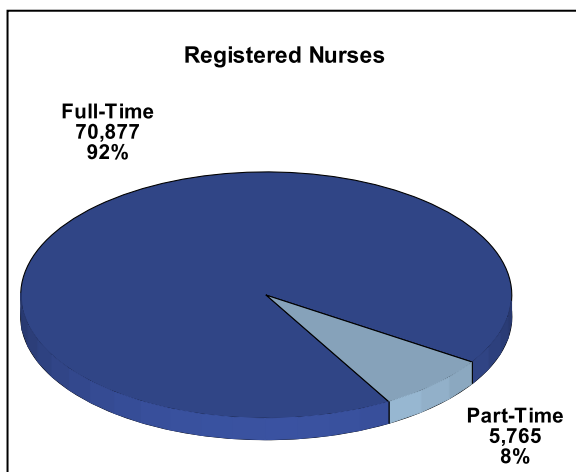
Educational financing was also analyzed with respect to age brackets. Statistical tests indicate that educational financing did vary among nurses of different ages, as shown in the graphs below.<sup>8</sup> Nurses under the age of 40, regardless of profession, were more likely to have relied on federal loans to finance their education than nurses over that age. Meanwhile, nurses age 50 and higher were more likely to have relied on personal savings to pay for their education than nurses under that age. Registered nurses over the age of 55 were also more likely to have relied on family resources, but this trend was not as pronounced for licensed practical nurses. Very few nurses over the age of 55 relied on federal loans to finance their education.



## Education Schedule

In total, 92 percent of all nurses attended school on a full-time basis, a number that was consistent across both registered nurses and licensed practical nurses.

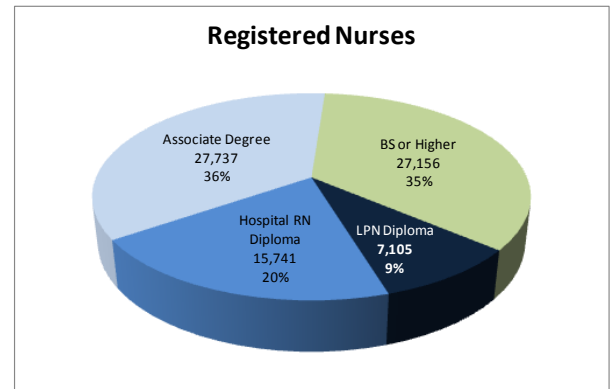
| Schedule         | Registered Nurses |      | Licensed Practical Nurses |      | All Nurses |      |
|------------------|-------------------|------|---------------------------|------|------------|------|
|                  | Number            | %    | Number                    | %    | Number     | %    |
| <b>Full-Time</b> | 70,877            | 92%  | 24,940                    | 92%  | 95,817     | 92%  |
| <b>Part-Time</b> | 5,765             | 8%   | 2,120                     | 8%   | 7,885      | 8%   |
| <b>Total</b>     | 76,642            | 100% | 27,060                    | 100% | 103,702    | 100% |



<sup>8</sup> For registered nurses, the relevant statistic was the following:  $\chi^2 (144, N = 78,713) = 7,903.957, p = .000$ . For licensed practical nurses, the relevant statistic was the following:  $\chi^2 (144, N = 27,766) = 3,243.167, p = .000$ .

## Initial Education Level

Almost all LPNs attained their initial nursing licenses after completing an LPN diploma certificate program. Only one percent attained an associate degree before attaining their initial license. Among RNs, nine percent attained LPN diplomas or certificates as their initial nursing degree. Over one-third of RNs began their nursing careers with a baccalaureate degree, while a similar number started with an associate degree. The remaining 20 percent began with a RN diploma.



| Education Level                | Registered Nurses |      | Licensed Practical Nurses |      | All Nurses |      |
|--------------------------------|-------------------|------|---------------------------|------|------------|------|
|                                | Number            | %    | Number                    | %    | Number     | %    |
| <b>LPN Diploma/Certificate</b> | 7,105             | 9%   | 27,135                    | 99%  | 34,240     | 33%  |
| <b>Hospital RN Diploma</b>     | 15,741            | 20%  | 37                        | 0%   | 15,778     | 15%  |
| <b>Associate Degree</b>        | 27,737            | 36%  | 199                       | 1%   | 27,936     | 27%  |
| <b>Baccalaureate Degree</b>    | 26,464            | 34%  | 0 <sup>9</sup>            | 0%   | 26,464     | 25%  |
| <b>Masters Degree</b>          | 661               | 1%   | 0 <sup>6</sup>            | 0%   | 661        | 1%   |
| <b>Doctorate</b>               | 31                | 0%   | 0 <sup>6</sup>            | 0%   | 31         | 0%   |
| <b>Total</b>                   | 77,739            | 100% | 27,371                    | 100% | 105,110    | 100% |

## Highest Education Level

The highest nursing certificate, diploma or degree that nurses received varied considerably across professions. Among registered nurses, a majority of respondents had either an associate or baccalaureate degree; most of the rest had either a master's degree or a RN diploma. Meanwhile, almost all licensed practical nurses had received an LPN diploma or certificate; most of the remainder had an associate degree.

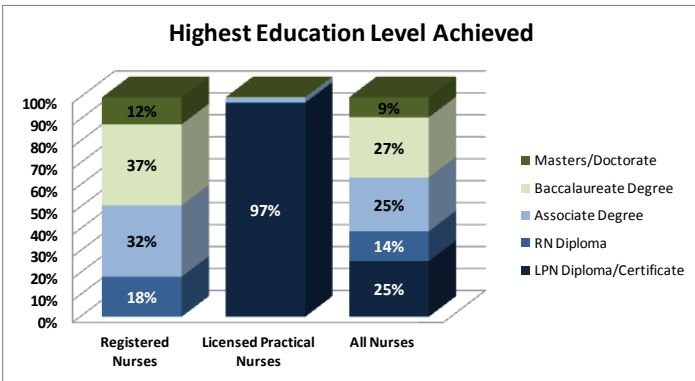
| Education Level                        | Registered Nurses |      | Licensed Practical Nurses |      | All Nurses |      |
|--|-------------------|------|---------------------------|------|------------|------|
|  | Number            | %    | Number                    | %    | Number     | %    |
| <b>LPN Diploma/Certificate</b>         | 0 <sup>10</sup>   | 0%   | 26,559                    | 97%  | 26,559     | 25%  |
| <b>RN Diploma</b>                      | 14,109            | 18%  | 113                       | 0%   | 14,222     | 14%  |
| <b>Associate Degree</b>                | 25,168            | 32%  | 548                       | 2%   | 25,716     | 25%  |
| <b>Baccalaureate Degree</b>            | 28,640            | 37%  | 53                        | 0%   | 28,693     | 27%  |
| <b>Masters Degree</b>                  | 8,977             | 12%  | 0 <sup>11</sup>           | 0%   | 8,977      | 9%   |
| <b>Doctor of Philosophy in Nursing</b> | 297               | 0%   | 0 <sup>8</sup>            | 0%   | 297        | 0%   |
| <b>Doctorate in Nursing Practice</b>   | 148               | 0%   | 0 <sup>8</sup>            | 0%   | 148        | 0%   |
| <b>Doctorate in Nursing Science</b>    | 38                | 0%   | 0                         | 0%   | 38         | 0%   |
| <b>Doctorate in Nursing</b>            | 64                | 0%   | 0 <sup>8</sup>            | 0%   | 64         | 0%   |
| <b>Total</b>                           | 77,441            | 100% | 27,273                    | 100% | 104,714    | 100% |

<sup>9</sup> Seven licensed practical nurses reported having a baccalaureate degree, master's degree or a doctorate. These responses were excluded in this section.

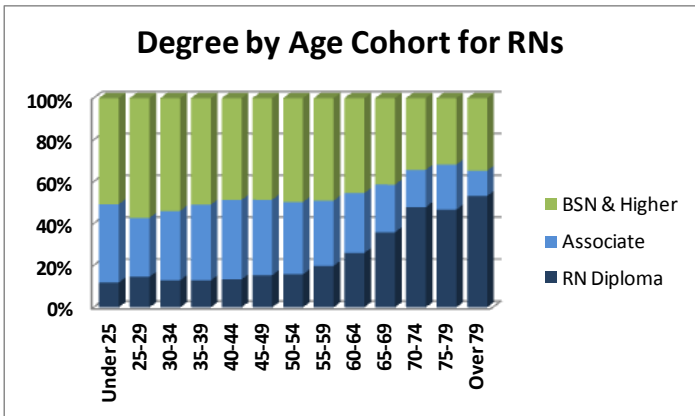
<sup>10</sup> 30 registered nurses indicated that a LPN diploma/certificate was their highest level of education. This was likely an error. These responses were excluded in this section.

<sup>11</sup> Twelve licensed practical nurses reported having a master's degree or a doctorate. These responses were excluded in this section.





*Almost half of Virginia's RNs have a BSN or higher degree, and the proportion is increasing. A full 57% of RNs age 25-29 have a BSN or higher degree.*



Registered nurses under the age of 55 were more likely to have an associate, baccalaureate or advanced degree than nurses above that age. Relative differences remain much the same until nurses reach their 60s; above that age, nurses become increasingly likely to hold a RN diploma and less likely to hold a higher degree. A majority of nurses under the age of 40 had a baccalaureate degree or higher.

| Age      | Registered Nurses |     |           |     |              |     |        |      |
|----------|-------------------|-----|-----------|-----|--------------|-----|--------|------|
|          | RN Diploma        |     | Associate |     | BSN & Higher |     | Total  |      |
|          | Number            | %   | Number    | %   | Number       | %   | Number | %    |
| Under 25 | 155               | 12% | 490       | 37% | 664          | 51% | 1,309  | 100% |
| 25-29    | 1,011             | 15% | 1,952     | 28% | 3,967        | 57% | 6,930  | 100% |
| 30-34    | 1,002             | 13% | 2,568     | 33% | 4,176        | 54% | 7,746  | 100% |
| 35-39    | 1,017             | 13% | 2,864     | 36% | 4,025        | 51% | 7,906  | 100% |
| 40-44    | 1,189             | 13% | 3,368     | 38% | 4,318        | 49% | 8,875  | 100% |
| 45-49    | 1,439             | 15% | 3,373     | 36% | 4,544        | 49% | 9,356  | 100% |
| 50-54    | 1,664             | 16% | 3,639     | 35% | 5,237        | 50% | 10,540 | 100% |
| 55-59    | 2,221             | 20% | 3,488     | 31% | 5,488        | 49% | 11,197 | 100% |
| 60-64    | 1,933             | 26% | 2,135     | 29% | 3,376        | 45% | 7,444  | 100% |
| 65-69    | 1,404             | 36% | 890       | 23% | 1,616        | 41% | 3,910  | 100% |
| 70-74    | 722               | 48% | 268       | 18% | 518          | 34% | 1,508  | 100% |
| 75-79    | 228               | 47% | 105       | 22% | 155          | 32% | 488    | 100% |
| Over 79  | 124               | 53% | 28        | 12% | 81           | 35% | 233    | 100% |
| All RNs  | 14,109            | 18% | 25,168    | 32% | 38,165       | 49% | 77,442 | 100% |

Totals may not add to 100% due to rounding.

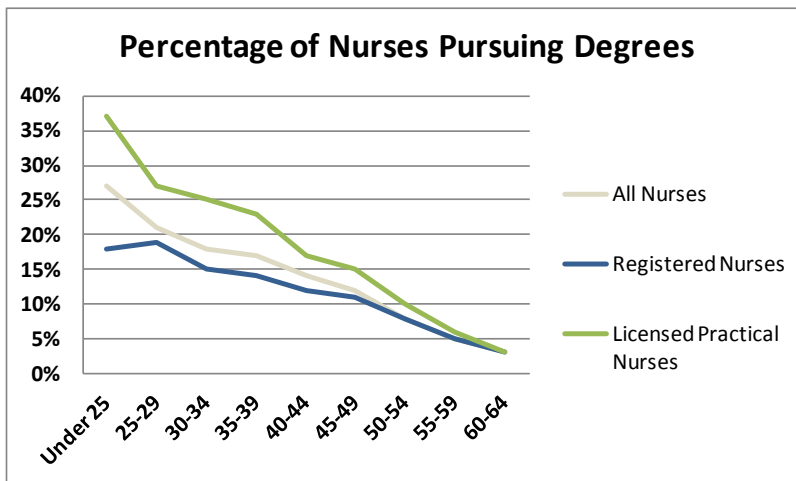
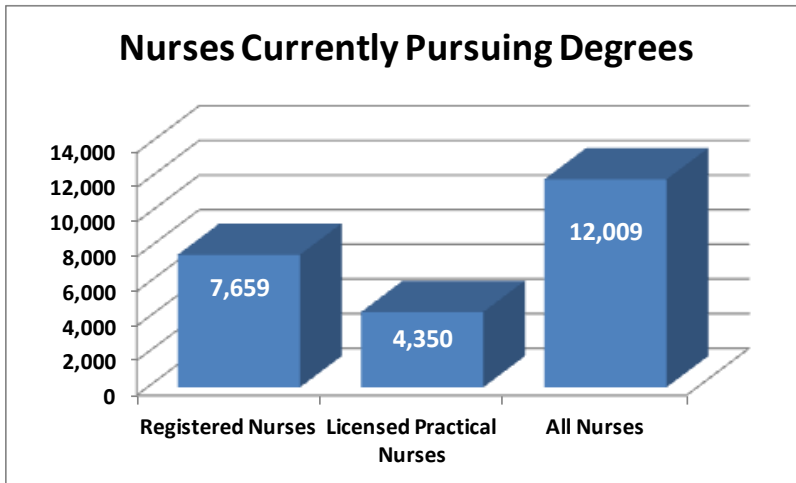
## Current Education

In total, 12,009 nurses were pursuing an advanced degree in a nursing education program at the time they completed their survey. Licensed practical nurses were somewhat more likely than registered nurses to be pursuing an advanced degree. Among registered nurses, 7,659 (10%) were pursuing an advanced degree, while 4,350 licensed practical nurses (16%) were also doing so.

Younger nurses were far more likely than older cohorts to be pursuing an advanced degree. More than 20 percent of all nurses under the age of 30 were seeking an advanced nursing degree, while 15 percent of nurses between the ages of 30 and 49 were doing likewise.

| Profession                | Yes    |     |
|---------------------------|--------|-----|
|                           | Number | %   |
| Registered Nurses         | 7,659  | 10% |
| Licensed Practical Nurses | 4,350  | 16% |
| All Nurses                | 12,009 | 11% |

| Age      | All Nurses |     |
|----------|------------|-----|
|          | Number     | %   |
| Under 25 | 633        | 27% |
| 25-29    | 2,038      | 21% |
| 30-34    | 1,984      | 18% |
| 35-39    | 1,862      | 17% |
| 40-44    | 1,670      | 14% |
| 45-49    | 1,531      | 12% |
| 50-54    | 1,148      | 8%  |
| 55-59    | 765        | 5%  |
| 60-64    | 268        | 3%  |
| 65-69    | 64         | 1%  |
| 70-74    | 32         | 2%  |
| 75-79    | 7          | 1%  |
| Over 79  | 8          | 2%  |
| Total    | 12,010     | 11% |



## Non-Nursing Education

### Highest Non-Nursing Education

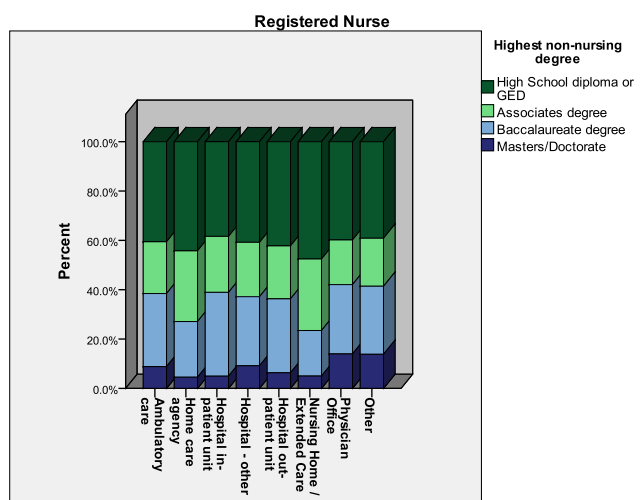
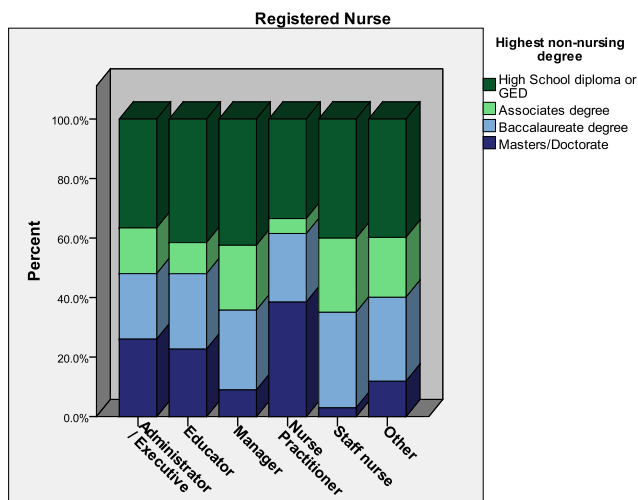
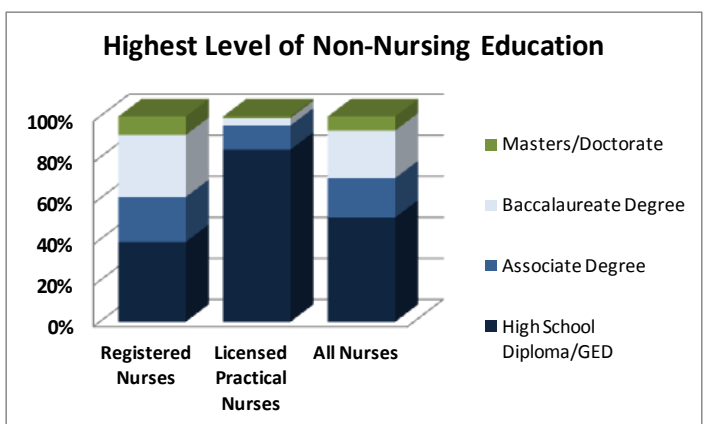
Registered nurses were far more likely than licensed practical nurses to have higher levels of non-nursing education, including associate, baccalaureate and master's degrees. Among all registered nurses, 61 percent held a non-nursing degree, but only 16 percent of licensed practical nurses held a non-nursing degree.

Nearly 40 percent of all registered nurses held a non-nursing baccalaureate or higher degree, while five percent of licensed practical nurses did the same. Overall, fewer than 10 percent of all nurses held an advanced non-nursing degree, which includes either a master's degree or doctorate.

For registered nurses, their highest non-nursing education level was compared with their primary position and their primary work setting to explore whether non-nursing education is applied to patient care/health care or to other areas. Statistical tests indicate that the highest non-nursing education level was related to both registered nurses' primary position and their primary position setting.<sup>12</sup>

The following two graphs represent these relationships visually for the most common primary positions and primary position settings. With respect to primary positions, nurse practitioners, administrators/executives and educators were more likely to have non-nursing degrees, while managers and staff nurses were less likely to have such degrees. Among settings, physician offices, ambulatory care and hospital (other) had a slightly larger proportion of registered nurses holding advanced non-nursing degrees.

| Highest Non-Nursing Degree | Registered Nurses |             | Licensed Practical Nurses |             | All Nurses     |             |
|----------------------------|-------------------|-------------|---------------------------|-------------|----------------|-------------|
|                            | Number            | %           | Number                    | %           | Number         | %           |
| High School Diploma/GED    | 29,357            | 39%         | 22,753                    | 84%         | 52,110         | 51%         |
| Associate Degree           | 16,477            | 22%         | 3,180                     | 12%         | 19,657         | 19%         |
| Baccalaureate Degree       | 22,800            | 30%         | 965                       | 4%          | 23,765         | 23%         |
| Masters Degree             | 6,116             | 8%          | 181                       | 1%          | 6,297          | 6%          |
| Doctorate                  | 646               | 1%          | 40                        | 0%          | 686            | 1%          |
| <b>Total</b>               | <b>75,396</b>     | <b>100%</b> | <b>27,119</b>             | <b>100%</b> | <b>102,515</b> | <b>100%</b> |



<sup>12</sup> For primary positions, the relevant statistic was the following:  $\chi^2 (60, N = 78,712) = 8429.609, p = .000$ . For primary position settings, the relevant statistic was the following:  $\chi^2 (90, N = 65,897) = 3898.727, p = .000$ .

## State of Initial Licensure

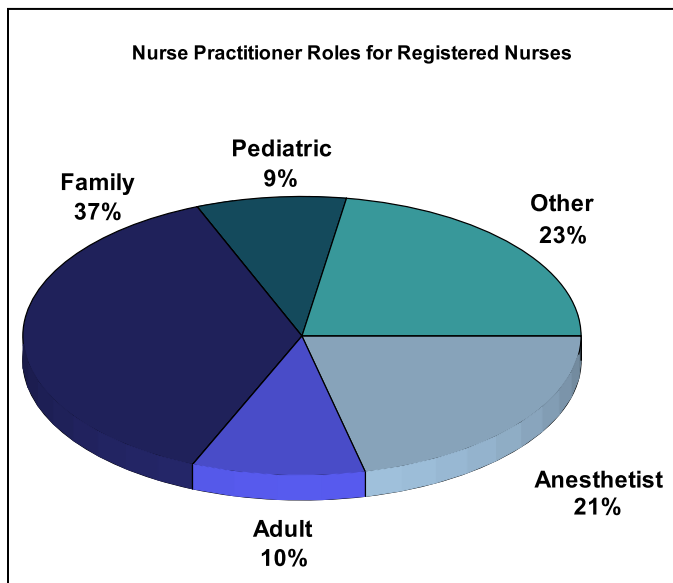
Among all nurses, 70 percent received their initial nursing license or certificate in Virginia. An additional seven percent received their initial nursing license in a state that bordered Virginia. Licensed practical nurses were more likely to have obtained their initial license in Virginia. Additionally, New York (4%) and Pennsylvania (3%) were the only two states that accounted for more than one percent of all initial licenses.

| State of Initial License | Registered Nurses |             | Licensed Practical Nurses |             | All Nurses     |             |
|--------------------------|-------------------|-------------|---------------------------|-------------|----------------|-------------|
|                          | Number            | %           | Number                    | %           | Number         | %           |
| Virginia                 | 50,129            | 65%         | 22,945                    | 85%         | 73,074         | 70%         |
| Border State             | 6,686             | 9%          | 945                       | 4%          | 7,631          | 7%          |
| Non-Border State         | 19,961            | 26%         | 3,081                     | 11%         | 23,042         | 22%         |
| <b>Total</b>             | <b>76,776</b>     | <b>100%</b> | <b>26,971</b>             | <b>100%</b> | <b>103,747</b> | <b>100%</b> |

## Nurse Practitioner Roles

Of the 78,711 registered nurses in Virginia's nursing workforce, we estimate about 5,302 are also nurse practitioners. Among nurse practitioners, 37 percent work in family practices, which was the largest percentage of any category. The roles of nurse anesthetists, adult and pediatric nurse practitioner were also well represented among the group of nurse practitioners in Virginia. In addition, geriatric and mental health nurse practitioners each represented two percent of all registered nurses who were also nurse practitioners. The Healthcare Workforce Data Center is currently undertaking a survey of Virginia's licensed nurse practitioners. The results of this survey, expected in the summer of 2013, will provide more refined estimates of the number and distribution of nurse practitioners in Virginia and more insight into the roles, duties and care they provide.

| Nurse Practitioner Roles         | Registered Nurses |              |
|----------------------------------|-------------------|--------------|
|                                  | Number            | % of all NPs |
| Family                           | 1,986             | 37%          |
| Anesthetist                      | 1,132             | 21%          |
| Adult                            | 533               | 10%          |
| Pediatric                        | 460               | 9%           |
| Acute Care                       | 239               | 5%           |
| Women's Health                   | 227               | 4%           |
| Midwife                          | 156               | 3%           |
| Neonatal                         | 132               | 2%           |
| OB/GYN                           | 119               | 2%           |
| Psychiatric and Mental Health    | 104               | 2%           |
| Geriatric                        | 81                | 2%           |
| Family Planning                  | 37                | 1%           |
| Emergency Room                   | 36                | 1%           |
| Medical                          | 31                | 1%           |
| Multiple Advanced Practice Roles | 29                | 1%           |
| <b>Total</b>                     | <b>5,302</b>      | <b>100%</b>  |

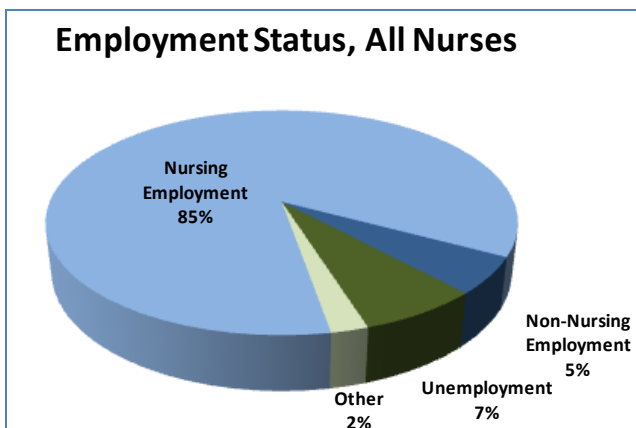


## Employment characteristics

### Employment Status

Among all nurses, 85 percent were employed in the nursing industry; the majority of these nurses were employed in full-time positions. In addition, another five percent were employed in a non-nursing capacity. However, seven percent of all nurses were unemployed, while another two percent were volunteering, disabled or retired.

These numbers are fairly consistent across professions. Registered nurses were more likely to be employed in the nursing industry, but licensed practical nurses were slightly more likely to be employed in a non-nursing capacity. Meanwhile, unemployment numbers are nearly identical across both professions.



| Employment Status             | Registered Nurses |             | Licensed Practical Nurses |             | All Nurses     |             |
|-------------------------------|-------------------|-------------|---------------------------|-------------|----------------|-------------|
|                               | Number            | %           | Number                    | %           | Number         | %           |
| <b>Nursing Employment</b>     |                   |             |                           |             |                |             |
| Full-Time                     | 52,806            | 68%         | 18,422                    | 67%         | 71,228         | 68%         |
| Part-Time                     | 10,186            | 13%         | 3,241                     | 12%         | 13,427         | 13%         |
| Per Diem                      | 4,084             | 5%          | 837                       | 3%          | 4,921          | 5%          |
| <b>Subtotal</b>               | <b>67,076</b>     | <b>87%</b>  | <b>22,500</b>             | <b>82%</b>  | <b>89,576</b>  | <b>85%</b>  |
| <b>Non-Nursing Employment</b> |                   |             |                           |             |                |             |
| Full-Time                     | 2,880             | 4%          | 1,236                     | 5%          | 4,116          | 4%          |
| Part-Time                     | 886               | 1%          | 359                       | 1%          | 1,245          | 1%          |
| Per Diem                      | 140               | 0%          | 38                        | 0%          | 178            | 0%          |
| <b>Subtotal</b>               | <b>3,906</b>      | <b>5%</b>   | <b>1,633</b>              | <b>6%</b>   | <b>5,539</b>   | <b>5%</b>   |
| <b>Unemployment</b>           |                   |             |                           |             |                |             |
| Temporarily Unemployed        | 2,275             | 3%          | 982                       | 4%          | 3,257          | 3%          |
| Seeking Nursing Work          | 1,695             | 2%          | 459                       | 2%          | 3,154          | 3%          |
| Seeking Non-Nursing Work      | 702               | 1%          | 271                       | 1%          | 973            | 1%          |
| <b>Subtotal</b>               | <b>4,672</b>      | <b>6%</b>   | <b>1,712</b>              | <b>6%</b>   | <b>7,384</b>   | <b>7%</b>   |
| <b>Other</b>                  |                   |             |                           |             |                |             |
| Volunteering                  | 829               | 1%          | 149                       | 1%          | 978            | 1%          |
| Disabled                      | 287               | 0%          | 155                       | 1%          | 442            | 0%          |
| Retired                       | 620               | 1%          | 233                       | 1%          | 853            | 1%          |
| <b>Subtotal</b>               | <b>1,736</b>      | <b>2%</b>   | <b>537</b>                | <b>2%</b>   | <b>2,273</b>   | <b>2%</b>   |
| <b>All Categories</b>         |                   |             |                           |             |                |             |
| <b>Total</b>                  | <b>77,390</b>     | <b>100%</b> | <b>26,382</b>             | <b>100%</b> | <b>103,772</b> | <b>100%</b> |

\*Figures may not add due to rounding

Unemployed individuals may be more likely to seek additional schooling opportunities. Among all unemployed nurses, 10 percent were currently pursuing an advanced degree. With respect to specific professions, unemployed licensed practical nurses were somewhat more likely than registered nurses to seek an advanced degree.

| Employment Status        | Currently Seeking Education? |           |                           |            |            |            |
|--------------------------|------------------------------|-----------|---------------------------|------------|------------|------------|
|                          | Registered Nurses            |           | Licensed Practical Nurses |            | All Nurses |            |
|                          | Yes                          |           | Yes                       |            | Yes        |            |
|                          | Number                       | %         | Number                    | %          | Number     | %          |
| Temporarily Unemployed   | 201                          | 9%        | 133                       | 14%        | 334        | 10%        |
| Seeking Nursing Work     | 129                          | 8%        | 183                       | 13%        | 312        | 10%        |
| Seeking Non-Nursing Work | 52                           | 8%        | 29                        | 11%        | 81         | 8%         |
| <b>Total</b>             | <b>382</b>                   | <b>8%</b> | <b>345</b>                | <b>13%</b> | <b>727</b> | <b>10%</b> |

## Number of Paid Positions

Among all employed nurses, 85 percent held one job, while an additional 11 percent held at least two jobs. These numbers were consistent across professions, but registered nurses were somewhat more likely to hold just one job. For two or more jobs, the percentages were identical across professions.

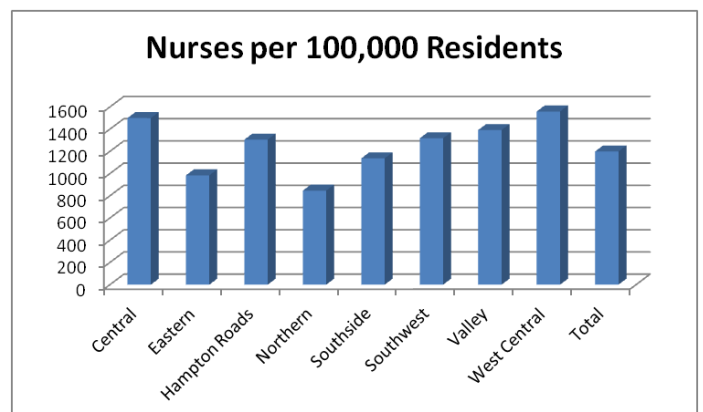
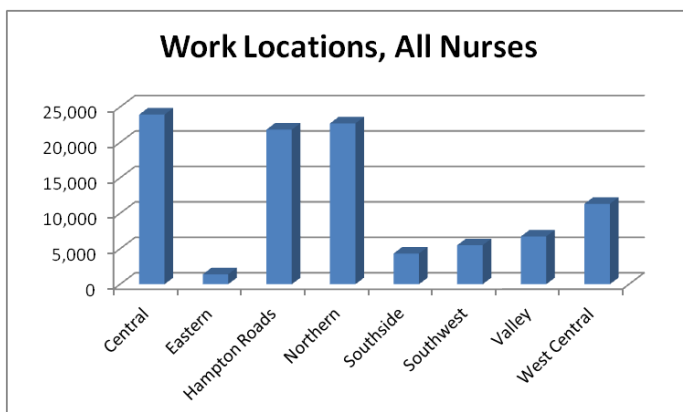
| Number of Jobs       | Registered Nurses |      | Licensed Practical Nurses |      | All Nurses |      |
|----------------------|-------------------|------|---------------------------|------|------------|------|
|                      | Number            | %    | Number                    | %    | Number     | %    |
| <b>Zero</b>          | 1,325             | 3%   | 1,078                     | 7%   | 2,403      | 4%   |
| <b>One</b>           | 36,732            | 86%  | 12,327                    | 82%  | 49,059     | 85%  |
| <b>Two</b>           | 4,312             | 10%  | 1,446                     | 10%  | 5,758      | 10%  |
| <b>Three or More</b> | 510               | 1%   | 163                       | 1%   | 673        | 1%   |
| <b>Total</b>         | 42,879            | 100% | 15,014                    | 100% | 57,893     | 100% |

## Distribution of Work Locations

The HWDC uses the eight regions defined by the Council of Virginia’s Future to give a general idea of how Virginia’s nursing workforce is distributed across the state (for information on COVF regions see the *Virginia Performs* website: <http://vaperforms.virginia.gov/extras/regions.php>). To get a better sense of the geographic distribution of nurses, see the Map section on page 27.

Of the 97,711 nurses who worked in Virginia, a majority worked in one of the commonwealth’s major metropolitan areas: Hampton Roads (22%), Northern Virginia (23%) and Central Virginia (25%). Together, these three regions accounted for 70 percent of all nurses’ work locations.

| COVF Region          | Registered Nurses |      | Licensed Practical Nurses |      | All Nurses |      | Nurses/100,000 Residents |
|----------------------|-------------------|------|---------------------------|------|------------|------|--------------------------|
|                      | Number            | %    | Number                    | %    | Number     | %    | Number                   |
| <b>Central</b>       | 18,586            | 25%  | 5,339                     | 22%  | 23,925     | 25%  | 1,500                    |
| <b>Eastern</b>       | 883               | 1%   | 515                       | 2%   | 1,398      | 1%   | 984                      |
| <b>Hampton Roads</b> | 15,600            | 21%  | 6,203                     | 25%  | 21,803     | 22%  | 1,306                    |
| <b>Northern</b>      | 18,685            | 26%  | 3,998                     | 16%  | 22,683     | 23%  | 846                      |
| <b>Southside</b>     | 2,580             | 4%   | 1,752                     | 7%   | 4,332      | 4%   | 1,137                    |
| <b>Southwest</b>     | 3,319             | 5%   | 2,178                     | 9%   | 5,497      | 6%   | 1,318                    |
| <b>Valley</b>        | 4,969             | 7%   | 1,764                     | 7%   | 6,733      | 7%   | 1,392                    |
| <b>West Central</b>  | 8,433             | 12%  | 2,907                     | 12%  | 11,340     | 12%  | 1,559                    |
| <b>Total</b>         | 73,053            | 100% | 24,655                    | 100% | 97,711     | 100% | 1,199                    |

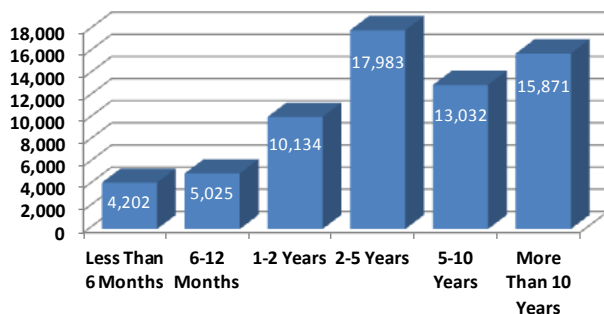


## Duration of Primary Position

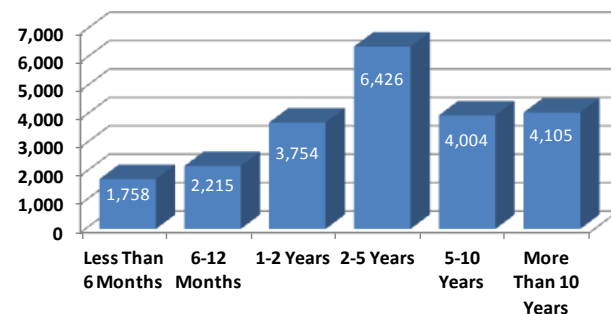
Among all nurses, a plurality had been at their primary job for between two and five years. However, registered nurses were more likely to have been at their primary position for a lengthy period of time. In total, 42 percent of nurses were at their primary job for more than five years, while only 31 percent of nurses were at their primary position for less than two years. These trends are fairly consistent across both professions, but whereas registered nurses were somewhat more likely to have held down their primary job for a longer period of time, licensed practical nurses were a bit more likely to have started a new primary job within the past year.

| Length in Position | Registered Nurses |     |              | Licensed Practical Nurses |     |              | All Nurses |     |              |
|--------------------|-------------------|-----|--------------|---------------------------|-----|--------------|------------|-----|--------------|
|                    | Number            | %   | Cumulative % | Number                    | %   | Cumulative % | Number     | %   | Cumulative % |
| More Than 10 Years | 15,871            | 24% | 24%          | 4,105                     | 18% | 18%          | 19,976     | 23% | 23%          |
| 5-10 Years         | 13,032            | 20% | 44%          | 4,004                     | 18% | 36%          | 17,036     | 19% | 42%          |
| 2-5 Years          | 17,983            | 27% | 71%          | 6,426                     | 29% | 65%          | 24,409     | 28% | 69%          |
| 1-2 Years          | 10,134            | 15% | 86%          | 3,754                     | 17% | 82%          | 13,888     | 16% | 85%          |
| 6-12 Months        | 5,025             | 8%  | 94%          | 2,215                     | 10% | 92%          | 7,240      | 8%  | 93%          |
| Less Than 6 Months | 4,202             | 6%  | 100%         | 1,758                     | 8%  | 100%         | 5,960      | 7%  | 100%         |

**Duration of Primary Position, RNs**



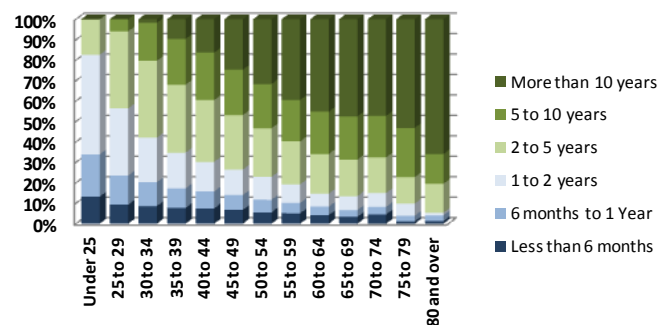
**Duration of Primary Position, LPNs**



The length of employment was examined across age cohorts to identify any possible relationship between the two variables. Statistical tests determined that the two variables were associated with each other.<sup>13</sup> As expected, nurses under the age of 30 were more likely to be at their primary position for less than two years than workers over that age. For nurses over the age of 50, a majority were at their primary position for at least five years.

The length of employment was also measured across nurses' responses for job satisfaction. Statistical tests determined that there was a statistically significant relationship between the two variables.<sup>14</sup> However, the effect on position duration is negligible.<sup>15</sup>

**Job Duration by Age Cohort**



<sup>13</sup> The relevant statistic was the following:  $\chi^2$  (60, N = 88,476) = 20,394.663, p = .000.

<sup>14</sup> The relevant statistic was the following:  $\chi^2$  (20, N = 88,482) = 336.741, p = .000.

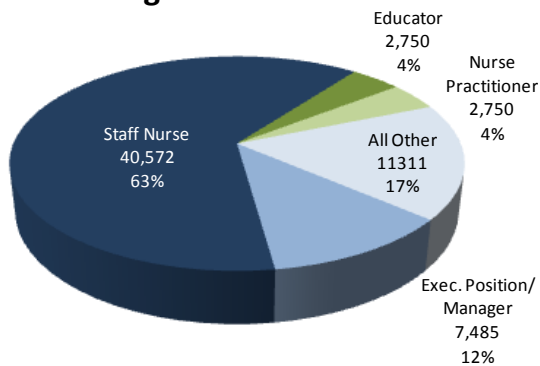
## Primary Position

The majority of all nurses were staff nurses in their primary job. This was true for both registered nurses and licensed practical nurses. The only other category in which nurses made up at least ten percent of the total population was “Other.” However, eight percent of all nurses listed their primary position as a manager.

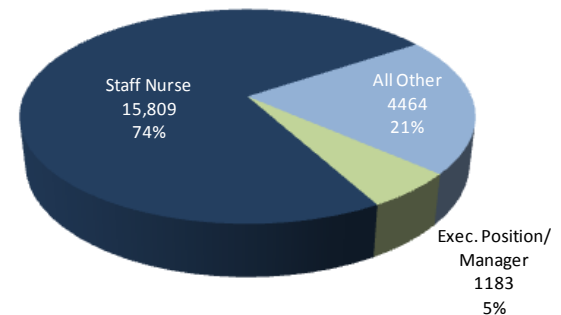
| Primary Position          | Registered Nurses |             | Licensed Practical Nurses |             | All Nurses    |             |
|---------------------------|-------------------|-------------|---------------------------|-------------|---------------|-------------|
|                           | Number            | %           | Number                    | %           | Number        | %           |
| Staff Nurse               | 40,572            | 63%         | 15,809                    | 73%         | 56,381        | 65%         |
| Other                     | 7,959             | 12%         | 3,761                     | 17%         | 11,720        | 14%         |
| Manager                   | 5,600             | 9%          | 943                       | 4%          | 6,543         | 8%          |
| Educator                  | 2,750             | 4%          | 127                       | 1%          | 2,877         | 3%          |
| Nurse Practitioner        | 2,750             | 4%          | 0 <sup>16</sup>           | 0%          | 2,750         | 3%          |
| Executive/Administrator   | 1,885             | 3%          | 240                       | 1%          | 2,125         | 2%          |
| Traveling Nurse           | 693               | 1%          | 489                       | 2%          | 1,182         | 1%          |
| Certified RN Anesthetist  | 937               | 1%          | 3                         | 0%          | 940           | 1%          |
| Consultant                | 692               | 1%          | 49                        | 0%          | 741           | 1%          |
| Clinical Nurse Specialist | 613               | 1%          | 0 <sup>17</sup>           | 0%          | 613           | 1%          |
| Researcher                | 320               | 0%          | 35                        | 0%          | 355           | 0%          |
| Certified Nurse Midwife   | 97                | 0%          | 0                         | 0%          | 97            | 0%          |
| <b>Total</b>              | <b>64,868</b>     | <b>100%</b> | <b>21,456</b>             | <b>100%</b> | <b>86,563</b> | <b>100%</b> |

*Two-thirds of Virginia's nurses are staff nurses, including 63% of RNs and 73% of LPNs.*

### Registered Nurses



### Licensed Practical Nurses



<sup>15</sup> This lack of practical significance can be seen from the Cramer's V value of just .031, which suggests that the relationship between job duration and job satisfaction, although statistically significant, is not a strong one.

<sup>16</sup> 49 licensed practical nurses listed nurse practitioner as their primary position. These responses were removed from this analysis.

<sup>17</sup> 190 licensed practical nurses listed clinical nurse specialist as their primary position. These responses were removed from this analysis.



## Primary Position Setting

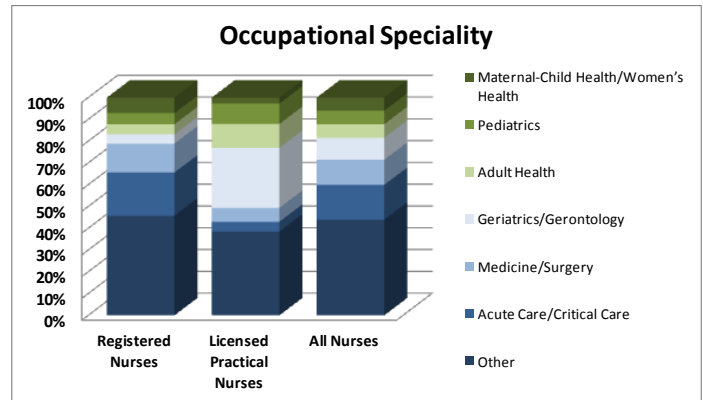
*A majority of RNs work in hospitals. LPNs are more likely to be employed in long-term care, home health or physician's office.*

A plurality of all nurses worked in an in-patient unit of a hospital. The same was true for the subset of registered nurses, but this was not the case for licensed practical nurses, who were more likely to work at a nursing home/extended care facility or a physician's office. Alternatively, relatively few registered nurses worked at a nursing home/extended care facility. All together, nursing homes/extended care facilities, in-patient units at hospitals, and physician offices accounted for 57 percent of all primary work settings. All other settings each accounted for less than ten percent of all nurses.

| Setting                                      | Registered Nurses |      | Licensed Practical Nurses |      | All Nurses |      |
|--|-------------------|------|---------------------------|------|------------|------|
|  | Number            | %    | Number                    | %    | Number     | %    |
| <b>Hospital: In-Patient Unit</b>             | 28,891            | 44%  | 2,168                     | 10%  | 31,059     | 35%  |
| <b>Nursing Home/Extended Care</b>            | 2,906             | 4%   | 7,810                     | 35%  | 10,716     | 12%  |
| <b>Physician Office</b>                      | 3,807             | 6%   | 4,577                     | 21%  | 8,384      | 10%  |
| <b>Hospital: Other</b>                       | 6,097             | 9%   | 482                       | 2%   | 6,579      | 7%   |
| <b>Hospital: Out-Patient Unit</b>            | 4,932             | 7%   | 534                       | 2%   | 5,466      | 6%   |
| <b>Home Care Agency</b>                      | 3,047             | 5%   | 2,115                     | 10%  | 5,162      | 6%   |
| <b>Other</b>                                 | 3,456             | 5%   | 1,109                     | 5%   | 4,565      | 5%   |
| <b>Ambulatory Care</b>                       | 2,681             | 4%   | 510                       | 2%   | 3,191      | 4%   |
| <b>School Health Service</b>                 | 1,965             | 3%   | 443                       | 2%   | 2,408      | 3%   |
| <b>Mental Health/Substance Abuse Agency</b>  | 1,187             | 2%   | 665                       | 3%   | 1,852      | 2%   |
| <b>Insurance/Case Management Co.</b>         | 1,221             | 2%   | 159                       | 1%   | 1,380      | 2%   |
| <b>Academic Education Program</b>            | 1,299             | 2%   | 25                        | 0%   | 1,324      | 2%   |
| <b>Public Health Agency</b>                  | 1,190             | 2%   | 100                       | 0%   | 1,290      | 1%   |
| <b>Hospice</b>                               | 1,027             | 2%   | 183                       | 1%   | 1,210      | 1%   |
| <b>Military Base/Facility</b>                | 905               | 1%   | 264                       | 1%   | 1,169      | 1%   |
| <b>Corrections Facility</b>                  | 383               | 1%   | 761                       | 3%   | 1,144      | 1%   |
| <b>Occupational Health Site</b>              | 485               | 1%   | 122                       | 1%   | 607        | 1%   |
| <b>Federally-Funded Health Clinic</b>        | 312               | 0%   | 121                       | 1%   | 433        | 0%   |
| <b>Policy, Planning or Regulatory Agency</b> | 106               | 0%   | 6                         | 0%   | 112        | 0%   |
| <b>Total</b>                                 | 65,897            | 100% | 22,154                    | 100% | 88,051     | 100% |

## Specialty

Nurses had a wide variety of specialties in their primary occupation. Among all nurses, the largest specialty was acute care/critical care, but this still only accounted for 16 percent of all nurses with a specialty. Other popular specialties included medicine/surgery and geriatrics/gerontology. However, the distribution of these specialties did vary considerably between professions. One-third of registered nurses specialized in acute care/critical care and medicine/surgery. By contrast, 28 percent of licensed practical nurses specialized in geriatrics/gerontology. In fact, of the 8,895 nurses who specialized in geriatrics/gerontology, over two-thirds were licensed practical nurses.

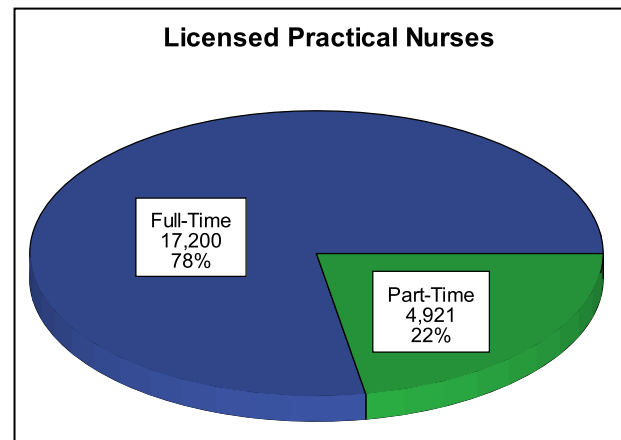
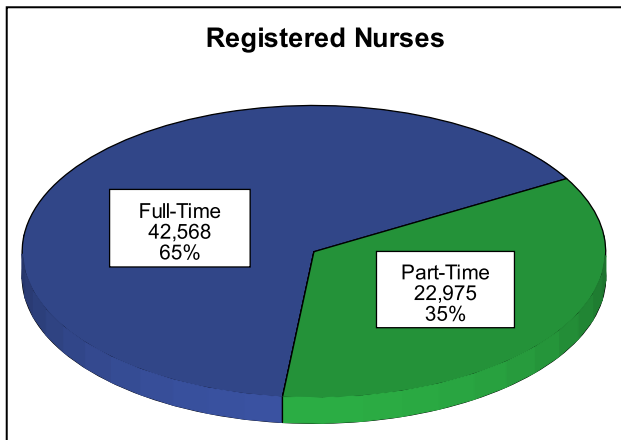


| Specialty                            | Registered Nurses |             | Licensed Practical Nurses |             | All Nurses    |             |
|--------------------------------------|-------------------|-------------|---------------------------|-------------|---------------|-------------|
|                                      | Number            | %           | Number                    | %           | Number        | %           |
| Acute Care/Critical Care             | 13,066            | 20%         | 985                       | 4%          | 14,051        | 16%         |
| Other                                | 9,232             | 14%         | 2,666                     | 12%         | 11,898        | 14%         |
| Medicine/Surgery                     | 8,717             | 13%         | 1,405                     | 6%          | 10,122        | 12%         |
| Geriatrics/Gerontology               | 2,797             | 4%          | 6,098                     | 28%         | 8,895         | 10%         |
| Adult Health                         | 3,056             | 5%          | 2,415                     | 11%         | 5,471         | 6%          |
| Pediatrics                           | 3,372             | 5%          | 2,072                     | 9%          | 5,444         | 6%          |
| Maternal-Child Health/Women's Health | 4,663             | 7%          | 609                       | 3%          | 5,272         | 6%          |
| Family Health                        | 1,692             | 3%          | 1,798                     | 8%          | 3,490         | 4%          |
| Mental Health/Substance Abuse        | 2,539             | 4%          | 931                       | 4%          | 3,470         | 4%          |
| Rehabilitation                       | 1,205             | 2%          | 1,065                     | 5%          | 2,270         | 3%          |
| Case Management                      | 1,997             | 3%          | 193                       | 1%          | 2,190         | 2%          |
| Oncology                             | 1,839             | 3%          | 168                       | 1%          | 2,007         | 2%          |
| Neonatal Care                        | 1,791             | 3%          | 22                        | 0%          | 1,813         | 2%          |
| Community Health                     | 1,315             | 2%          | 339                       | 2%          | 1,654         | 2%          |
| Student Health                       | 1,289             | 2%          | 308                       | 1%          | 1,597         | 2%          |
| Anesthesia                           | 1,289             | 2%          | 45                        | 0%          | 1,334         | 2%          |
| Public Health                        | 1,067             | 2%          | 219                       | 1%          | 1,286         | 1%          |
| Trauma                               | 1,163             | 2%          | 63                        | 0%          | 1,226         | 1%          |
| Dialysis                             | 883               | 1%          | 273                       | 1%          | 1,156         | 1%          |
| Quality Improvement                  | 796               | 1%          | 70                        | 0%          | 866           | 1%          |
| Palliative Care                      | 718               | 1%          | 135                       | 1%          | 853           | 1%          |
| Occupational Health                  | 607               | 1%          | 147                       | 1%          | 754           | 1%          |
| Informatics                          | 276               | 0%          | 32                        | 0%          | 308           | 0%          |
| Policy/Regulation                    | 267               | 0%          | 36                        | 0%          | 303           | 0%          |
| Nurse Midwifery                      | 96                | 0%          | 4                         | 0%          | 100           | 0%          |
| <b>Total</b>                         | <b>65,732</b>     | <b>100%</b> | <b>22,098</b>             | <b>100%</b> | <b>87,830</b> | <b>100%</b> |

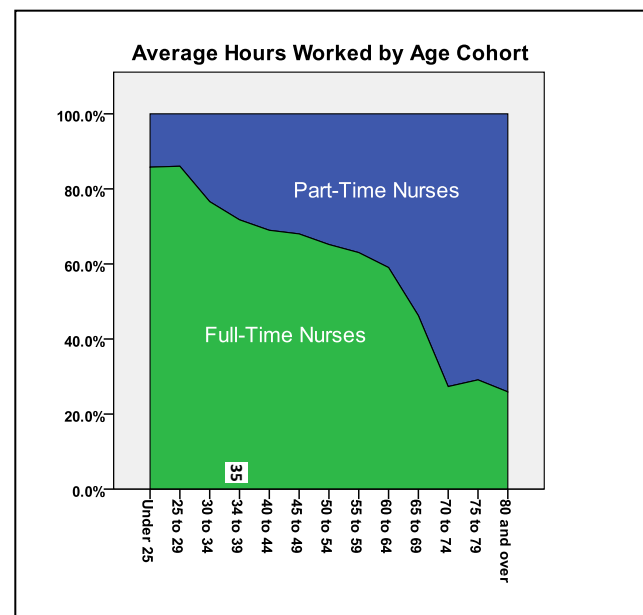
## Average Hours Worked at Primary Work Location

More than two-thirds of all nurses worked as full-time employees, defined as those working more than 32 hours per week, but there was some variation between professions. Registered nurses were more likely to work less than 32 hours per week, while nearly four-fifths of all licensed practical nurses worked full time, compared to just 65 percent for registered nurses.

| Average Hours    | Registered Nurses |      | Licensed Practical Nurses |      | All Nurses |      |
|------------------|-------------------|------|---------------------------|------|------------|------|
|                  | Number            | %    | Number                    | %    | Number     | %    |
| <b>Part-Time</b> | 22975             | 35%  | 4921                      | 22%  | 27896      | 32%  |
| <b>Full-Time</b> | 42568             | 65%  | 17200                     | 78%  | 59768      | 68%  |
| <b>Total</b>     | 65543             | 100% | 22121                     | 100% | 87664      | 100% |



The average hours worked at primary work locations was compared against different age cohorts in order to determine whether there was any variation between young and old nurses. Statistical tests indicate that there was a statistically significant relationship between the age and work hours.<sup>18</sup> For nurses between the ages of 25 and 59, who represent the majority of all nurses in the sample, the number who worked full time remained basically constant across age cohort. However, the number of nurses who worked part time steadily increased above age 60. Among nurses who were older than 65, part-time work was relatively more common, while such work was rather uncommon among nurses under the age of 30.



<sup>18</sup> The relevant statistic was the following:  $\chi^2 (12, N = 87,664) = 4687.937, p = .000$ .

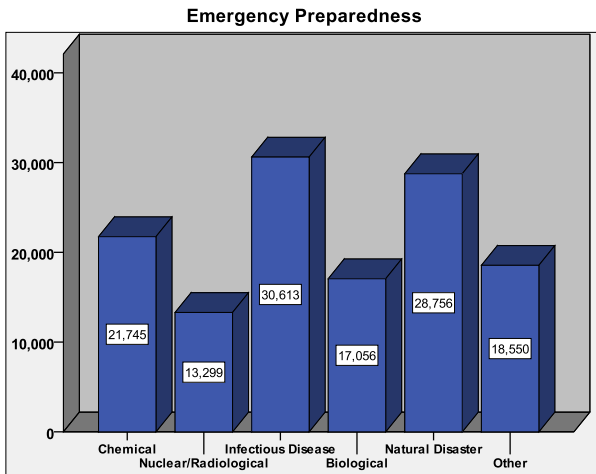
## Job Satisfaction

Among all nurses, 93 percent said that they were either very or somewhat satisfied with their jobs. This result held across both professions, but licensed practical nurses were somewhat more likely to say that they were very satisfied with their jobs. In total, only seven percent of all nurses were dissatisfied with their jobs, and only two percent were very dissatisfied. Registered nurses were slightly more likely to be dissatisfied with their jobs, but the total number of registered nurses who were dissatisfied was still just eight percent.

*93% of Virginia's nurses are satisfied with jobs, including 57% who are very satisfied.*

| Job Satisfaction             | Registered Nurses |      | Licensed Practical Nurses |      | All Nurses |      |
|------------------------------|-------------------|------|---------------------------|------|------------|------|
|                              | Number            | %    | Number                    | %    | Number     | %    |
| <b>Very Satisfied</b>        | 36704             | 56%  | 13454                     | 61%  | 50158      | 57%  |
| <b>Somewhat Satisfied</b>    | 23871             | 36%  | 7405                      | 33%  | 31276      | 36%  |
| <b>Somewhat Dissatisfied</b> | 3813              | 6%   | 947                       | 4%   | 4760       | 5%   |
| <b>Very Dissatisfied</b>     | 1056              | 2%   | 304                       | 1%   | 1360       | 2%   |
| <b>Total</b>                 | 65444             | 100% | 22110                     | 100% | 87554      | 100% |

## Emergency Preparedness



About 39 percent of nurses received or provided emergency preparedness training. Of these, infectious disease epidemics were the most common area of training, but all areas, with the exception of nuclear/radiological accidents or attacks, had percentages in the double digits. These percentages were also fairly consistent across professions. Note that respondents could select more than one answer to this question.

| Emergency                   | Registered Nurses |              | Licensed Practical Nurses |               | All Nurses |                 |
|-----------------------------|-------------------|--------------|---------------------------|---------------|------------|-----------------|
|                             | Number            | % of All RNs | Number                    | % of All LPNs | Number     | % of All Nurses |
| <b>Infectious Disease</b>   | 22,878            | 29%          | 7,735                     | 28%           | 30,613     | 29%             |
| <b>Natural Disaster</b>     | 21,981            | 28%          | 6,775                     | 24%           | 28,756     | 27%             |
| <b>Chemical</b>             | 16,885            | 21%          | 4,860                     | 18%           | 21,745     | 20%             |
| <b>Other</b>                | 13,427            | 17%          | 5,122                     | 18%           | 18,550     | 17%             |
| <b>Biological</b>           | 13,865            | 18%          | 3,192                     | 11%           | 17,056     | 16%             |
| <b>Nuclear/Radiological</b> | 10,929            | 14%          | 2,370                     | 9%            | 13,299     | 12%             |
| <b>Any Training</b>         | 31,516            | 40%          | 10,457                    | 38%           | 41,973     | 39%             |

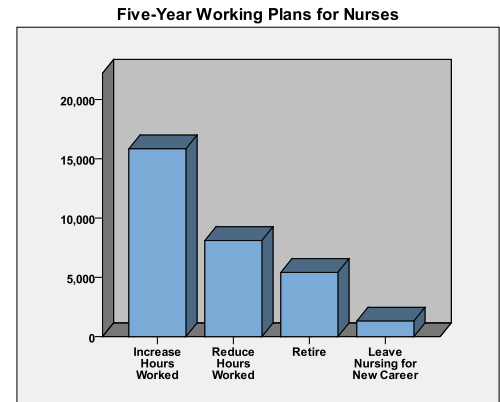
Nurses were able to make multiple selections.

## Future Plans

### Five-Year Plans

Almost 16,000 nurses planned on increasing the number of hours worked, while just over 8,000 planned on decreasing the number of hours worked. Most of the rest were planning to retire in the next five years; very few nurses planned on leaving the profession.

With respect to specific professions, licensed practical nurses said that they were more likely to increase the number of hours worked over the next five years, while registered nurses were more likely to maintain or decrease the number of hours worked.



| Plans                 | Registered Nurses | Licensed Practical Nurses | All Nurses |
|-----------------------|-------------------|---------------------------|------------|
|                       | Number            | Number                    | Number     |
| <b>Increase Hours</b> | 10,262            | 5,575                     | 15,837     |
| <b>Decrease Hours</b> | 6,694             | 1,409                     | 8,103      |
| <b>Leave Nursing</b>  | 1,005             | 302                       | 1,307      |
| <b>Retire</b>         | 4,364             | 1,048                     | 5,412      |

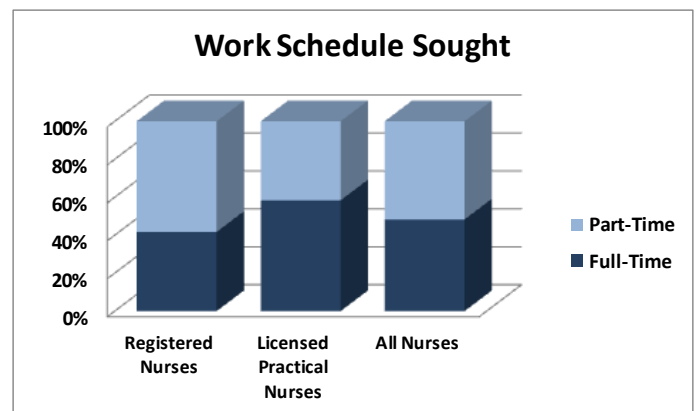
### Seeking Employment

Among all nurses who were not employed in a nursing position, nearly two-thirds were seeking employment in a nursing job. Licensed practical nurses were more likely to seek a job in their profession than registered nurses.

| Seeking Employment in Nursing? | Registered Nurses |      | Licensed Practical Nurses |      | All Nurses |      |
|--------------------------------|-------------------|------|---------------------------|------|------------|------|
|                                | Number            | %    | Number                    | %    | Number     | %    |
| <b>Yes</b>                     | 6,835             | 59%  | 4,488                     | 69%  | 11,323     | 63%  |
| <b>No</b>                      | 4,763             | 41%  | 2,028                     | 31%  | 6,791      | 37%  |
| <b>Total</b>                   | 11,598            | 100% | 6,516                     | 100% | 18,114     | 100% |

### Employment Schedule for Job Seekers

Among all unemployed nurses, responses were approximately split evenly between those who sought full-time employment and those who sought part-time employment. However, this overall trend masked differences within professions. Registered nurses were more likely to seek part-time employment, while licensed practical nurses were more likely to seek full-time employment.



| Schedule Sought  | Registered Nurses |      | Licensed Practical Nurses |      | All Nurses |      |
|------------------|-------------------|------|---------------------------|------|------------|------|
|                  | Number            | %    | Number                    | %    | Number     | %    |
| <b>Full-Time</b> | 3,202             | 42%  | 2,935                     | 58%  | 6,137      | 48%  |
| <b>Part-Time</b> | 4,469             | 58%  | 2,092                     | 42%  | 6,561      | 52%  |
| <b>Total</b>     | 7,671             | 100% | 5,027                     | 100% | 12,698     | 100% |

## Job Search Timeline

---

A majority of all unemployed nurses planned on beginning their job search within the next six months. This was true for both registered nurses and licensed practical nurses. Of those nurses who planned on waiting at least one year to begin their job search, the vast majority planned on beginning their search within the next five years. Relatively few nurses said that they would be waiting more than five years to begin their job search in the nursing profession.

| Timeline                  | Registered Nurses |      | Licensed Practical Nurses |      | All Nurses |      |
|---------------------------|-------------------|------|---------------------------|------|------------|------|
|                           | Number            | %    | Number                    | %    | Number     | %    |
| <b>Less Than 6 Months</b> | 4,722             | 57%  | 3,908                     | 69%  | 8,630      | 62%  |
| <b>1-2 Years</b>          | 2,014             | 25%  | 1,009                     | 18%  | 3,023      | 22%  |
| <b>2-5 Years</b>          | 944               | 11%  | 419                       | 7%   | 1,363      | 10%  |
| <b>5-10 Years</b>         | 325               | 4%   | 120                       | 2%   | 445        | 3%   |
| <b>More Than 10 Years</b> | 210               | 3%   | 178                       | 3%   | 388        | 3%   |
| <b>Total</b>              | 8,215             | 100% | 5,634                     | 100% | 13,849     | 100% |

## Full Time Equivalency Units (FTEs)

*Virginia's nurses provided over 85,000 full-time equivalency units, including over 63,000 provided by RNs and almost 23,000 provided by LPNs.*

Economists and human resources professionals often refer to Full Time Equivalency units (or FTEs) when discussing labor market participation. Conceptually, an FTE represents one full time worker or one full time position. One FTE may be provided by two part-time workers or one full time worker. Alternatively, one worker with one full time job and one part time job may provide 1.5 FTEs. FTEs provide an easy way to compare labor or job supply while accounting for differing levels of work supplied by individuals.

FTEs are defined using a variety of methods. Human resources professionals (and employees) often think in terms of positions or jobs, with one full time position equivalent to one FTE and one part time position equivalent to 0.5 FTEs. Economists (and payroll professionals), however, often need more precise measures of hours worked. Economists often use hours worked. Using FTEs, however, provides a human scale for examining data and provides for easy benchmarking across data sources.

When using FTEs, readers are cautioned to look closely at how FTEs are defined. Does FTE refer to positions, or is it derived from hours worked (or some other measure of services provided, such as patients seen)? How many hours equates to one FTE? Unless defined equivalently, direct comparisons of FTEs require caution. In many cases, direct comparisons are not appropriate. For this iteration of the nursing survey, the HWDC estimated FTEs by examining each nurse's reported work hours at his or her primary work location and comparing that to the number of work locations reported. If the number of work hours was missing, we imputed work hours as the mean of groups based on each nurse's profession, age, and number of work locations and the metro status of his or her primary work location (See Appendix B). More recent HWDC surveys, including the new nursing survey, take a closer look at the actual number of hours worked by nurses across all work locations, and uses these figures to calculate FTEs.

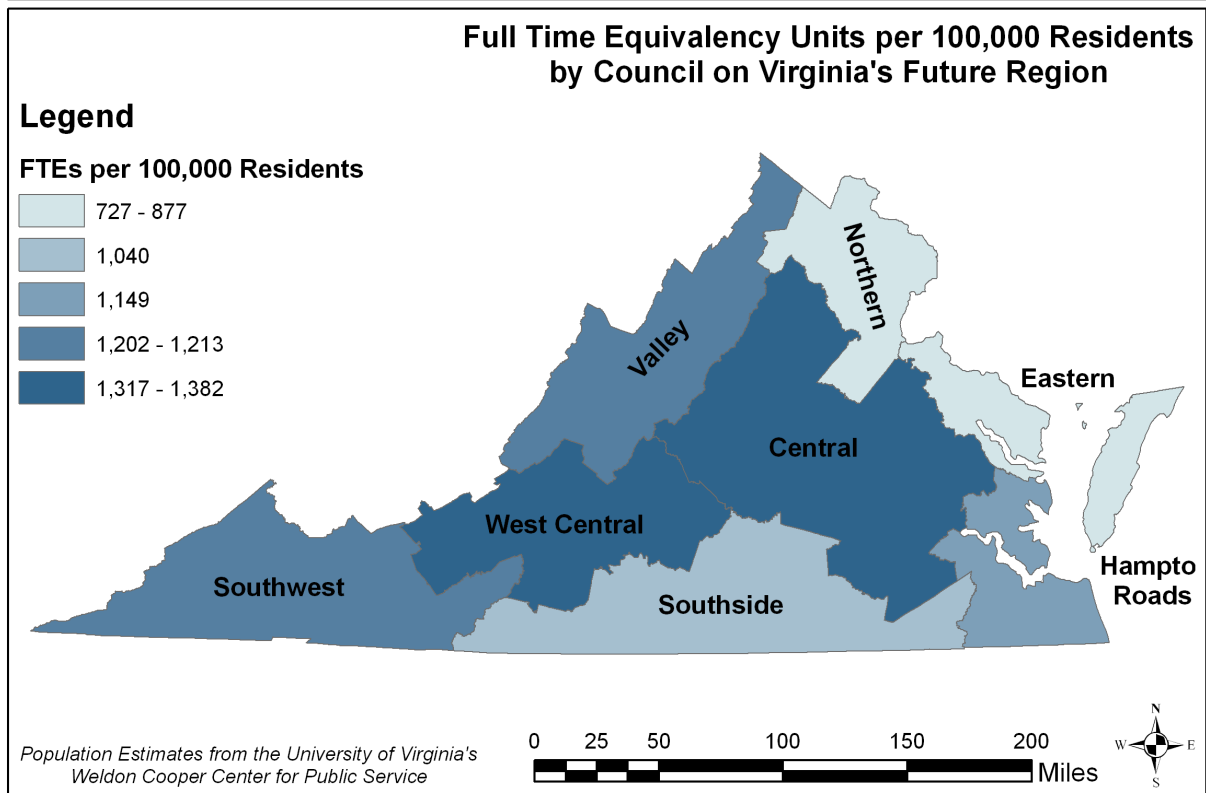
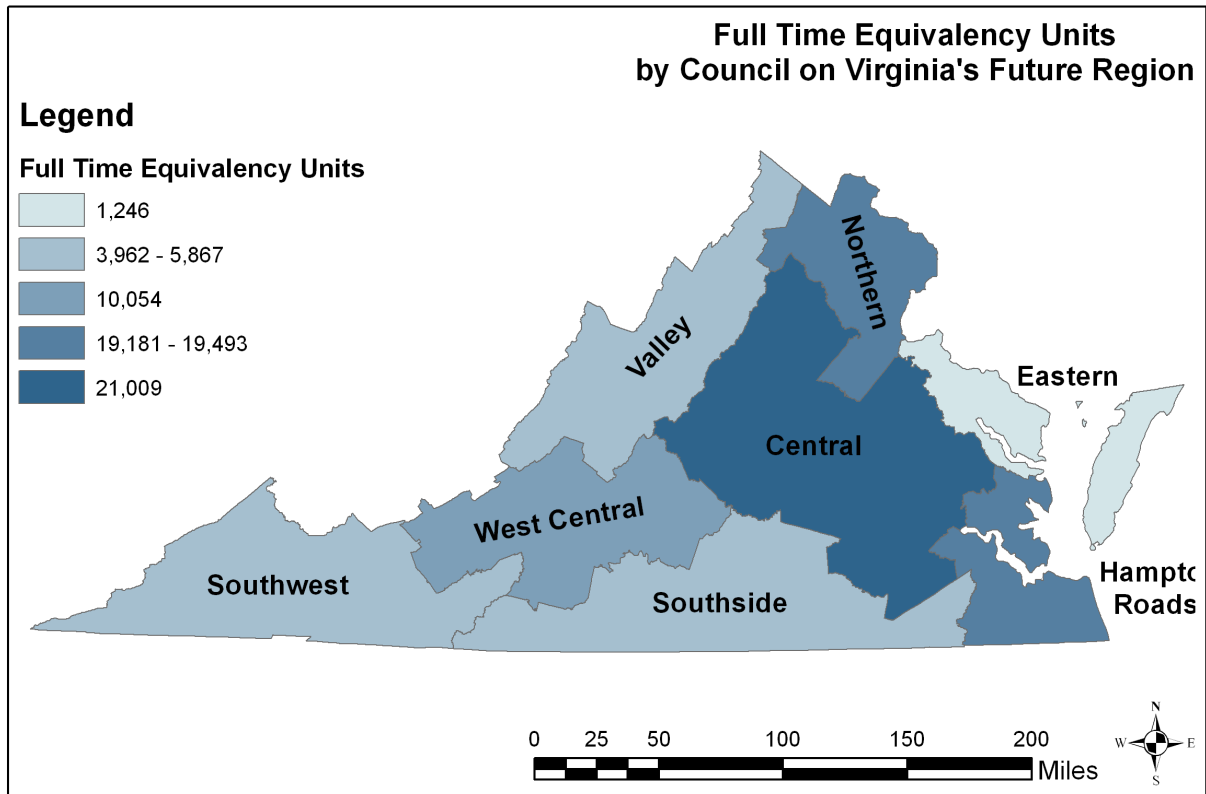
FTEs by age, along with the average FTE per individual in the age group, are reported in the table at right. All told, the HWDC estimates the 97,975 Virginia nurses who worked during the survey period provided 85,943 FTEs or about 0.88 FTEs per nurse. The 73,169 registered nurses who worked during the survey period provided 63,051 FTEs, or about 0.86 FTEs per registered nurse, while 24,806 working licensed practical nurses provided 22,892 FTEs, or about 0.93 FTEs per licensed practical nurse.

| Age                | Registered Nurses |        | Licensed Practical Nurses |        | All Nurses |        |
|--------------------|-------------------|--------|---------------------------|--------|------------|--------|
|                    | Mean              | Sum    | Mean                      | Sum    | Mean       | Sum    |
| <b>Under 25</b>    | 0.99              | 1,272  | 0.94                      | 939    | 0.97       | 2,210  |
| <b>25 to 29</b>    | 0.97              | 6,499  | 0.95                      | 2,419  | 0.97       | 8,918  |
| <b>30 to 34</b>    | 0.92              | 6,799  | 0.95                      | 2,841  | 0.92       | 9,641  |
| <b>34 to 39</b>    | 0.89              | 6,671  | 0.94                      | 2,817  | 0.91       | 9,488  |
| <b>40 to 44</b>    | 0.88              | 7,362  | 0.94                      | 2,925  | 0.89       | 10,287 |
| <b>45 to 49</b>    | 0.87              | 7,761  | 0.95                      | 2,836  | 0.89       | 10,597 |
| <b>50 to 54</b>    | 0.85              | 8,536  | 0.93                      | 2,706  | 0.87       | 11,241 |
| <b>55 to 59</b>    | 0.83              | 8,879  | 0.93                      | 2,484  | 0.85       | 11,362 |
| <b>60 to 64</b>    | 0.80              | 5,548  | 0.9                       | 1,753  | 0.82       | 7,300  |
| <b>65 to 69</b>    | 0.75              | 2,550  | 0.83                      | 747    | 0.76       | 3,297  |
| <b>70 to 74</b>    | 0.64              | 809    | 0.71                      | 256    | 0.65       | 1,065  |
| <b>75 to 79</b>    | 0.61              | 245    | 0.76                      | 119    | 0.66       | 365    |
| <b>80 and over</b> | 0.63              | 119    | 0.70                      | 51     | 0.65       | 171    |
| <b>Total</b>       | 0.86              | 63,051 | 0.93                      | 22,892 | 0.88       | 85,943 |

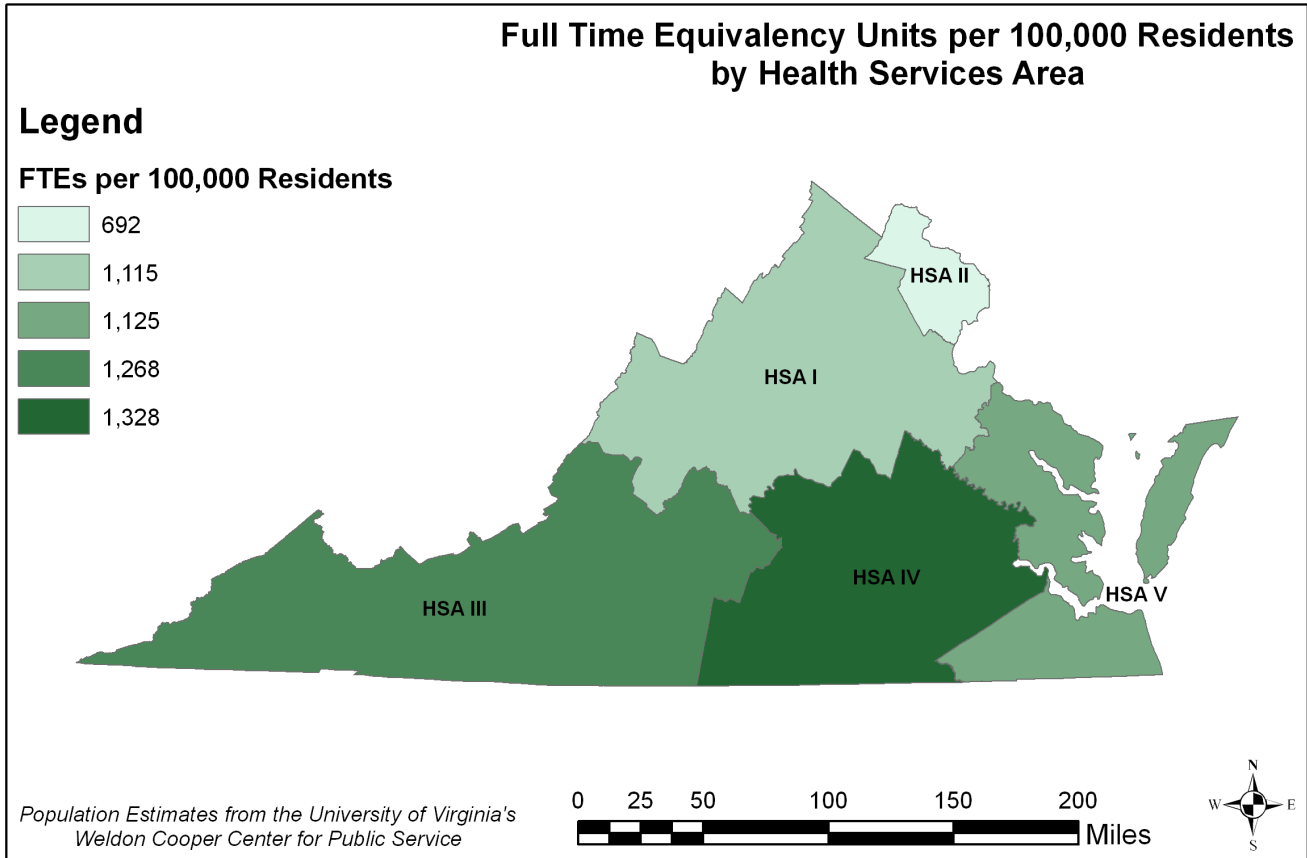
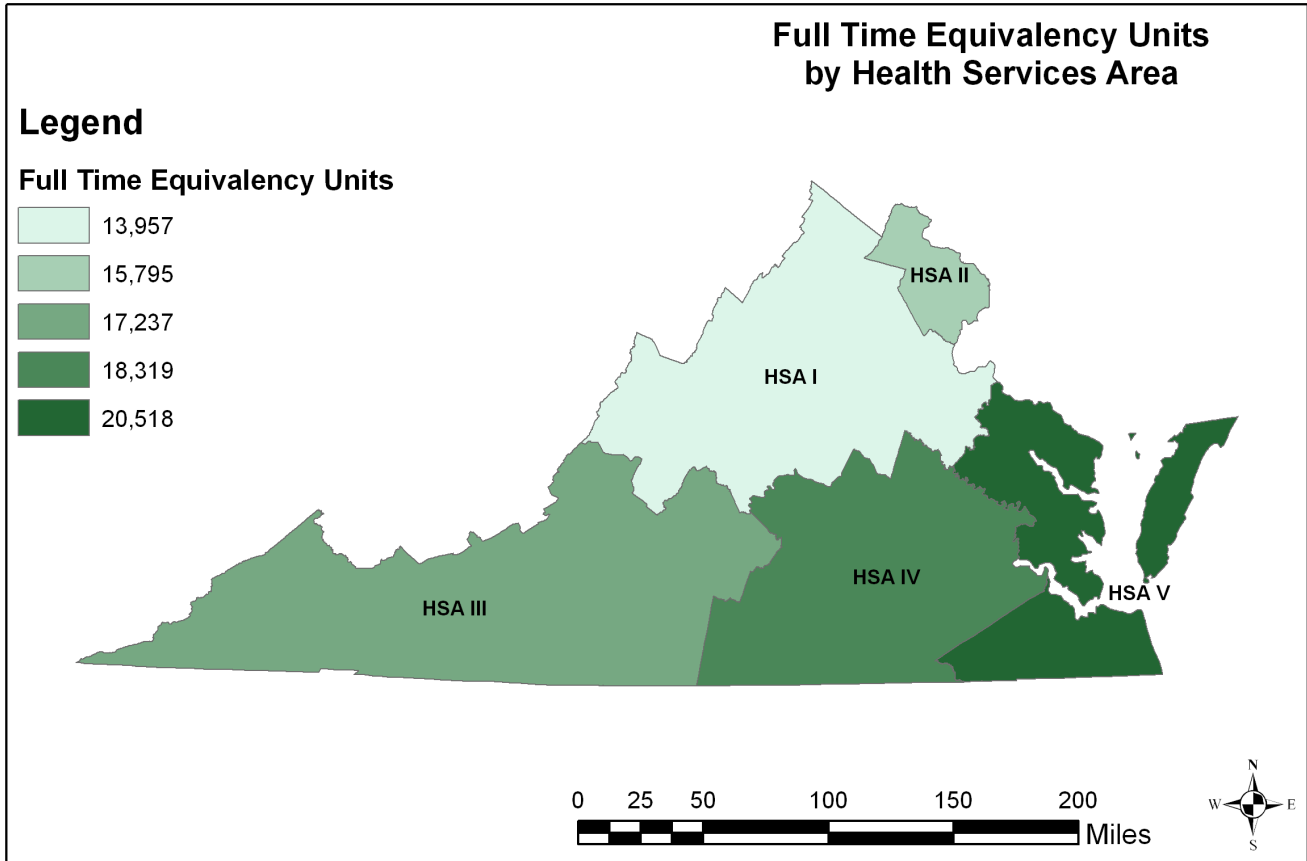
# Maps

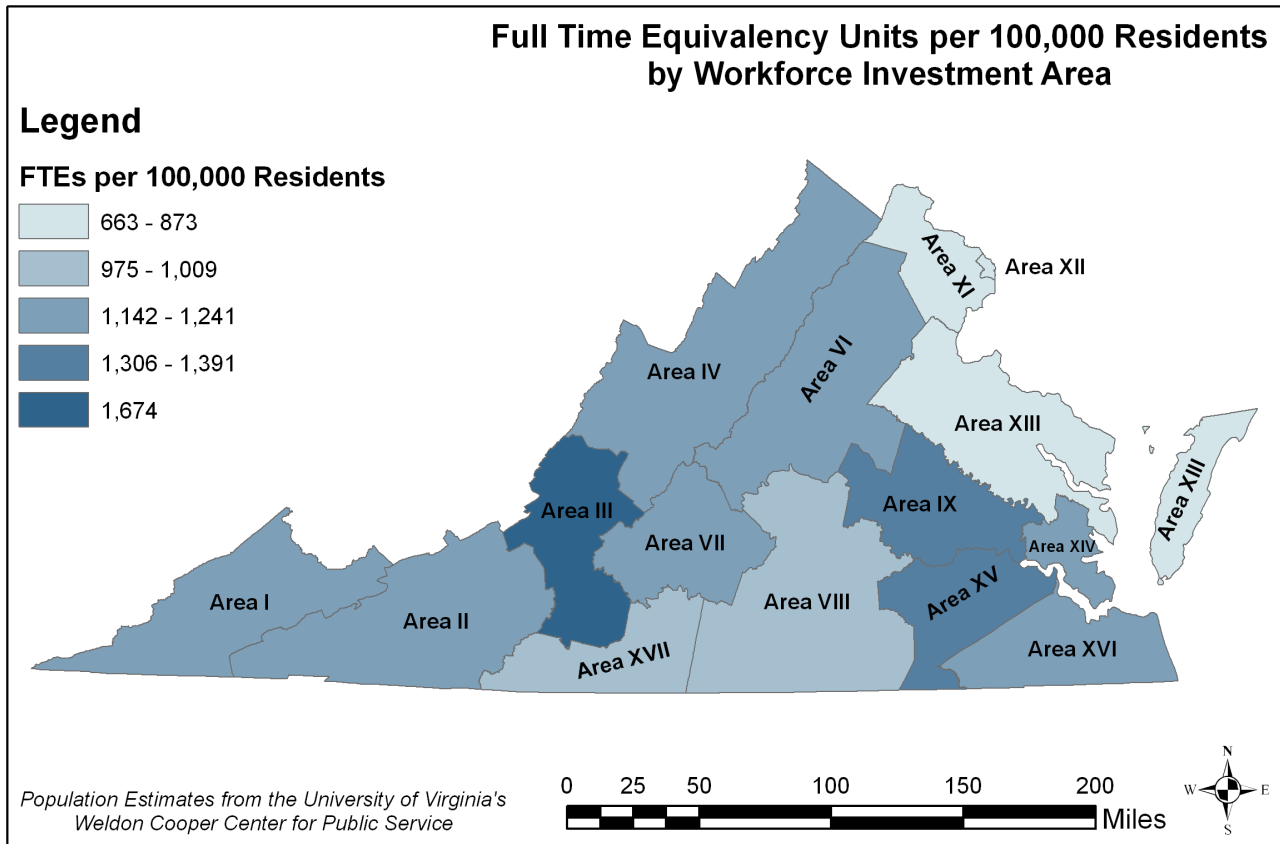
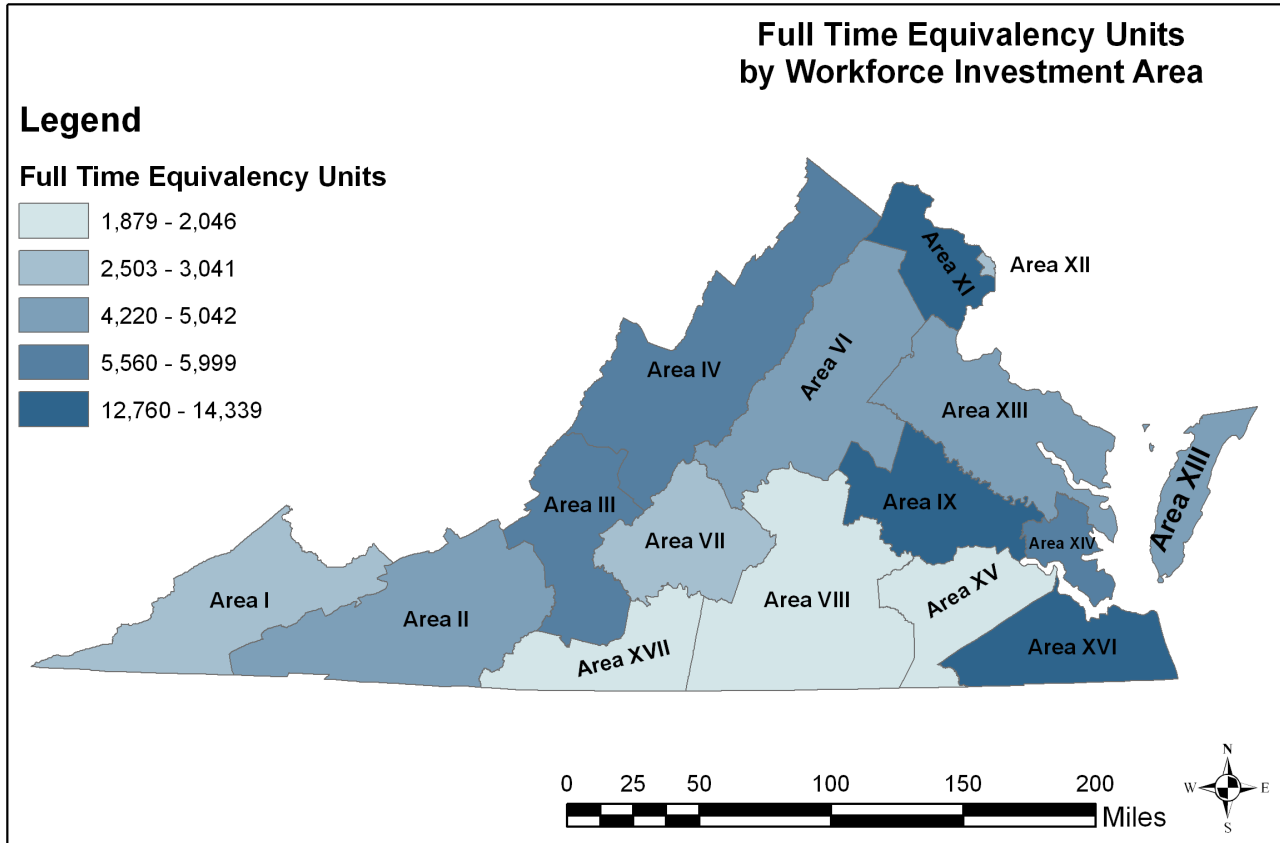
## All Nurses

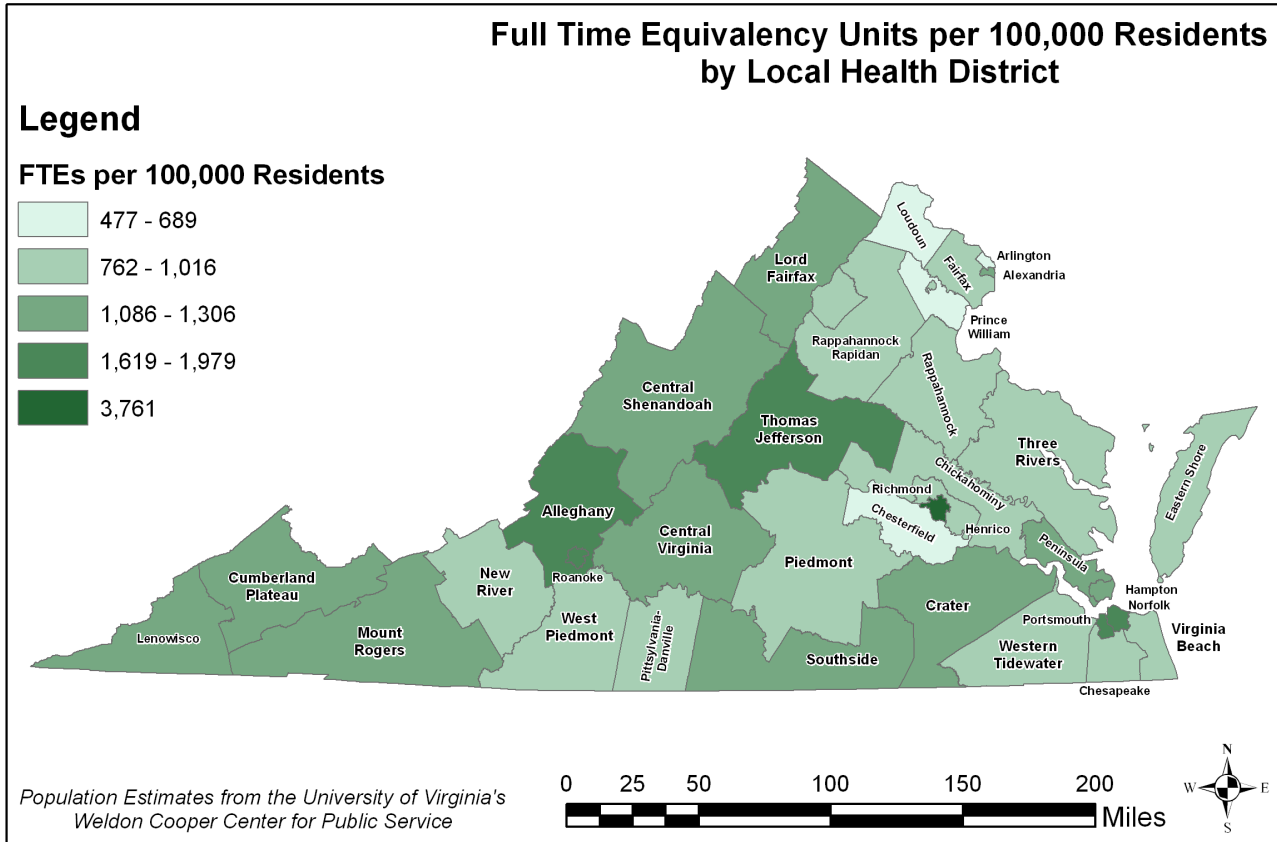
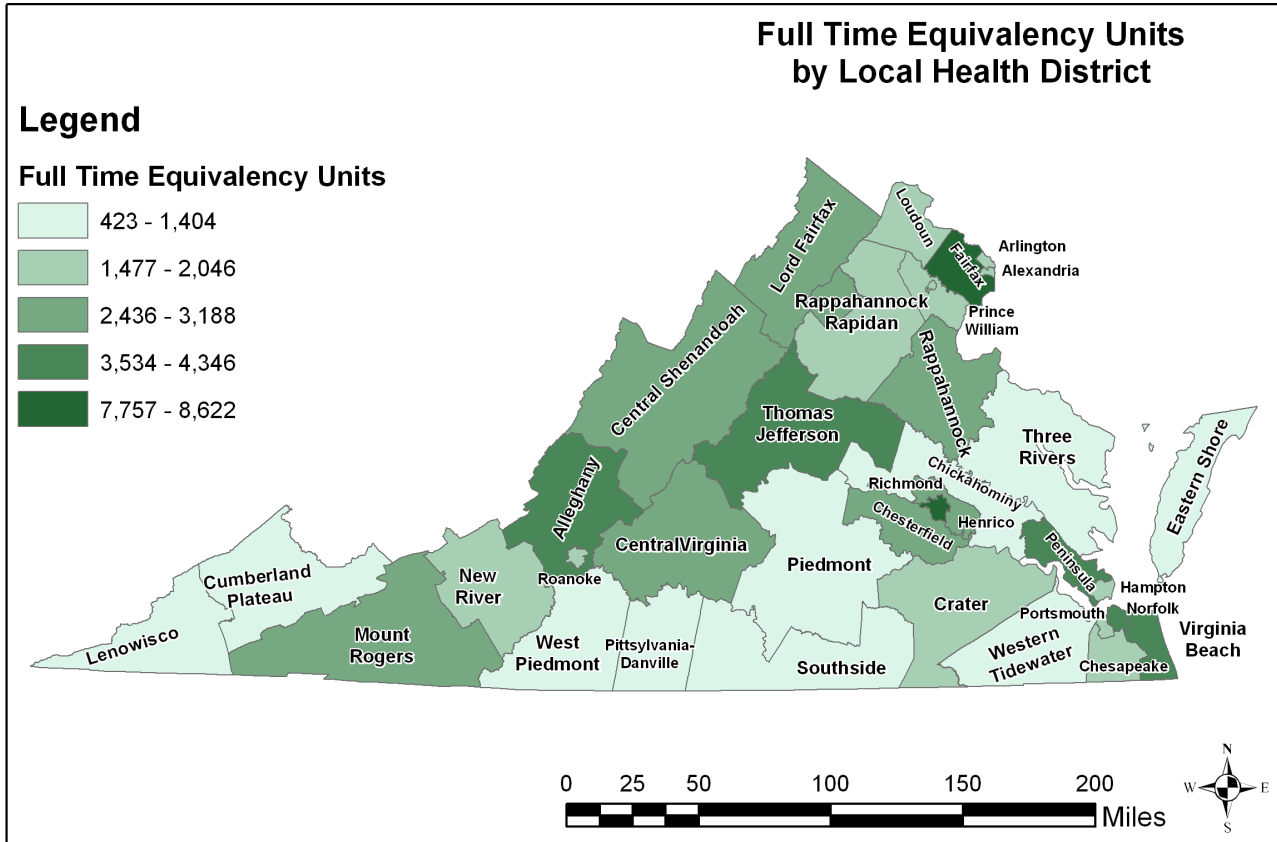
### All Nurses: Council on Virginia's Future Regions

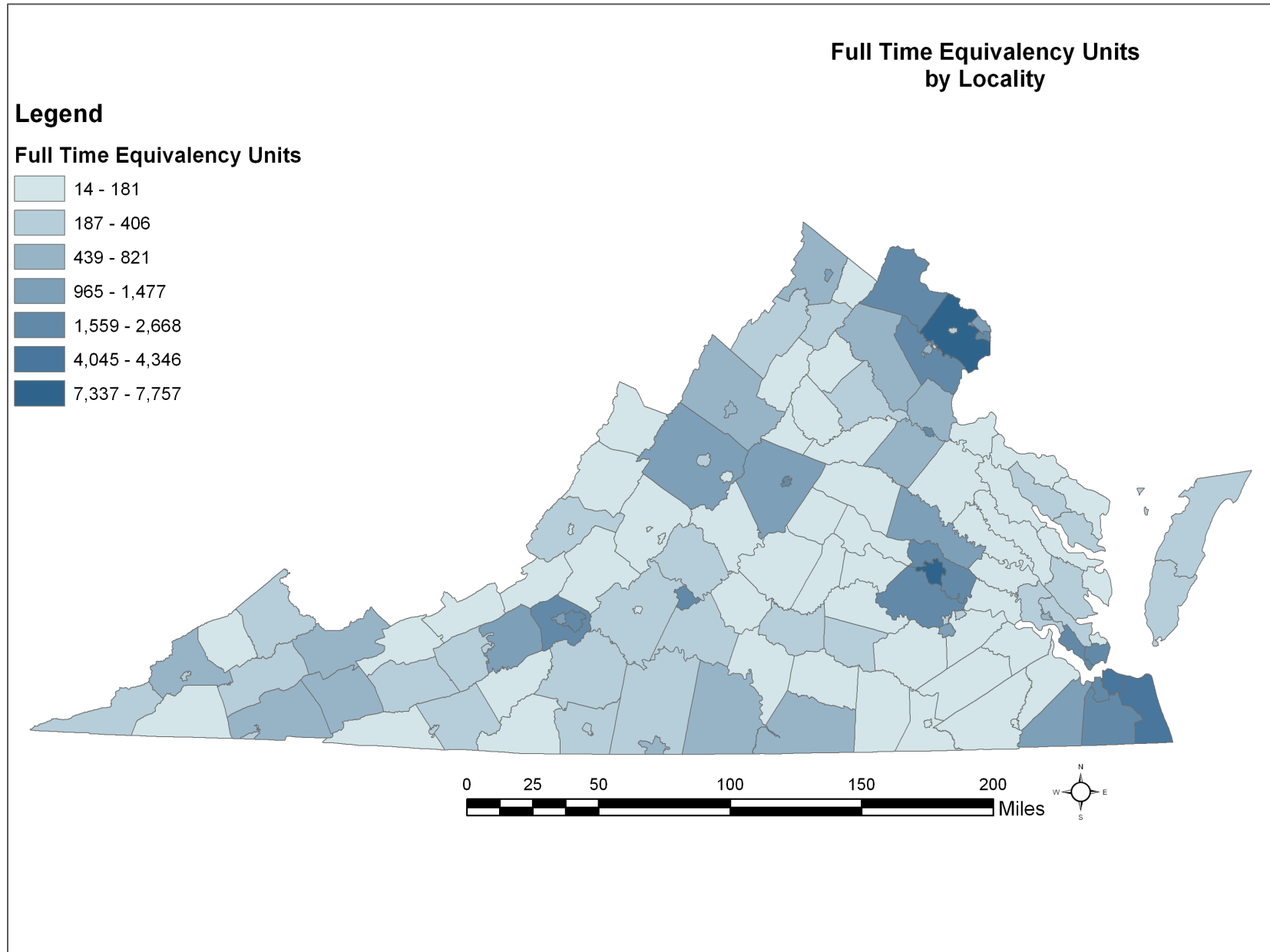










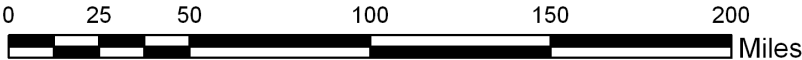
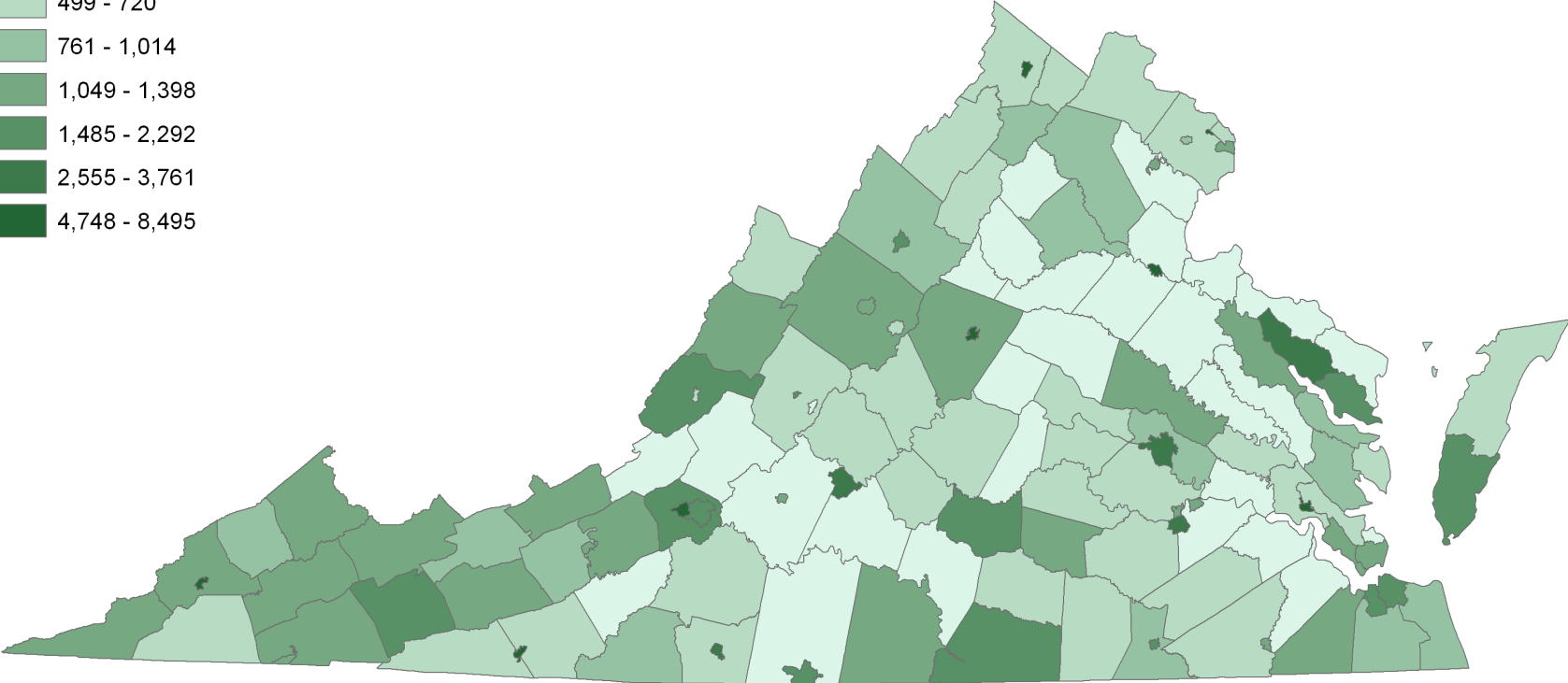


# Full Time Equivalency Units per 100,000 Residents by Locality

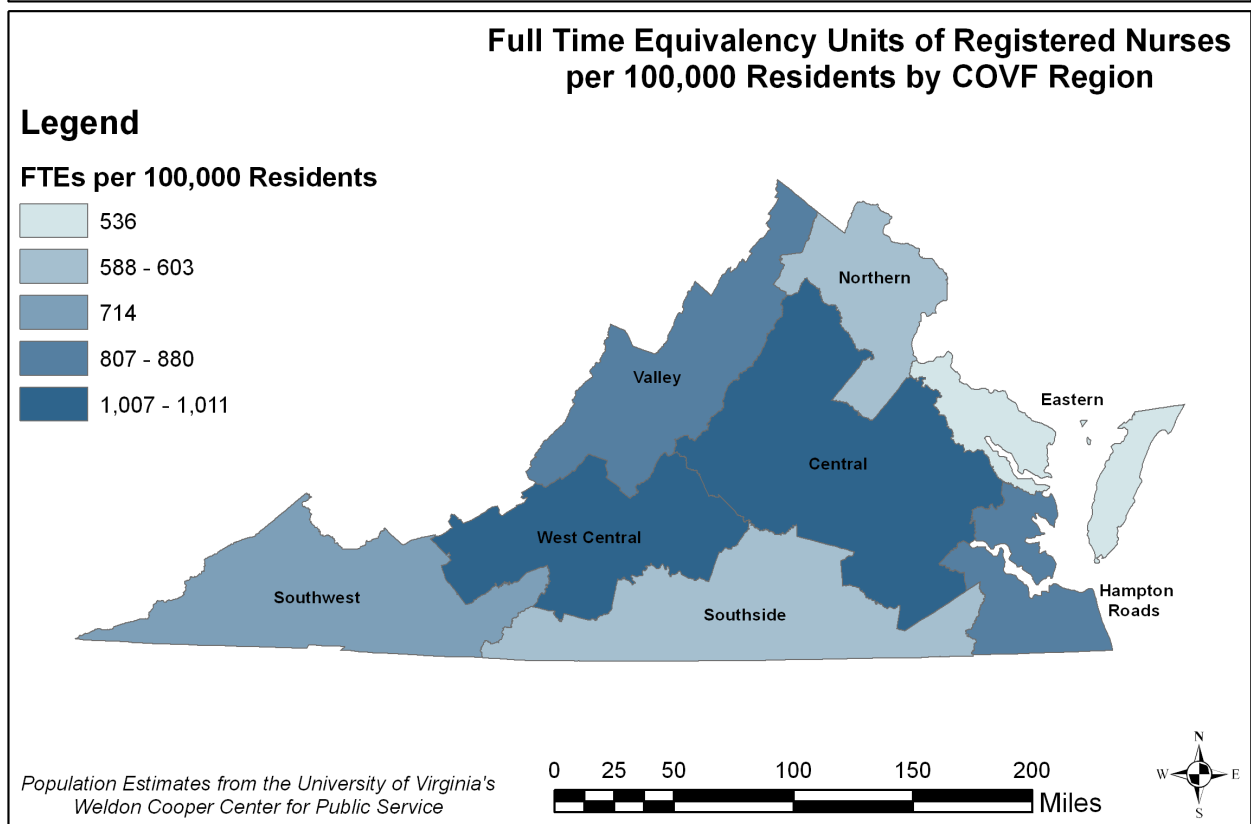
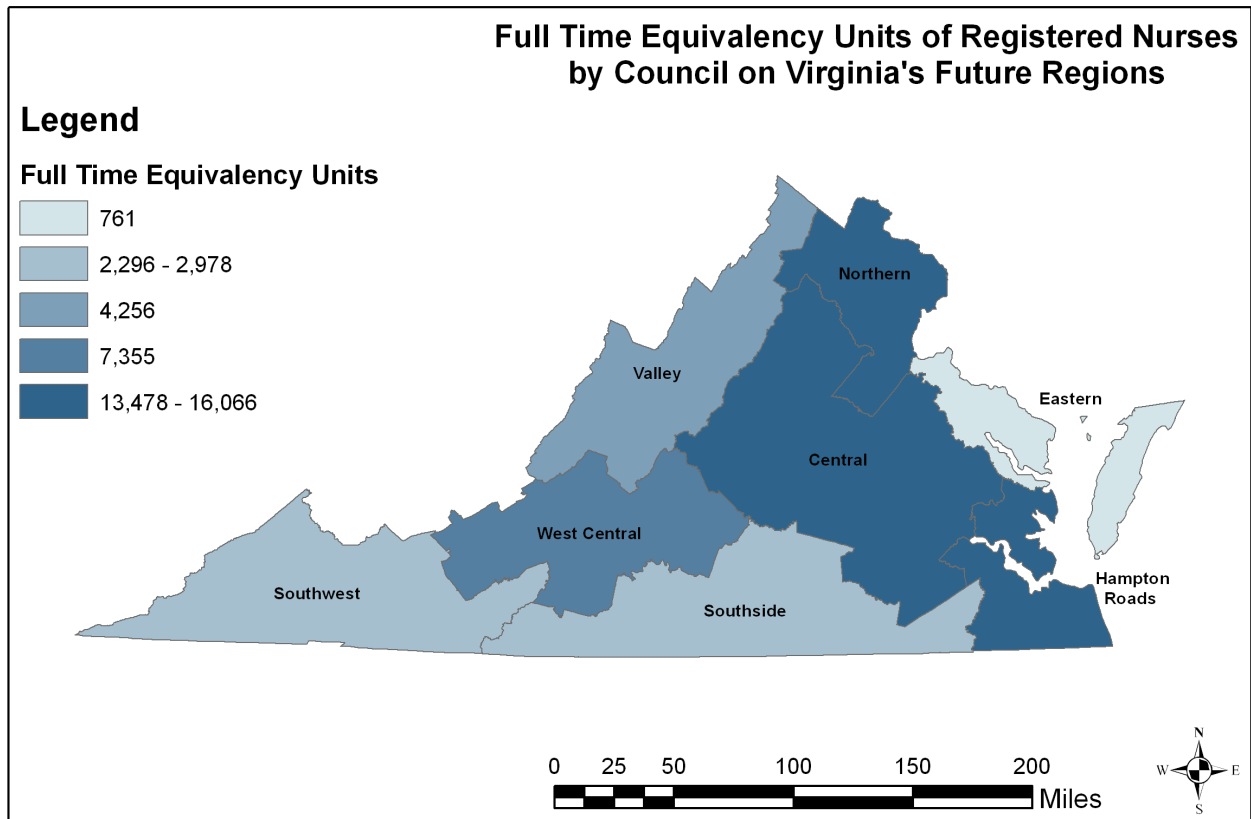
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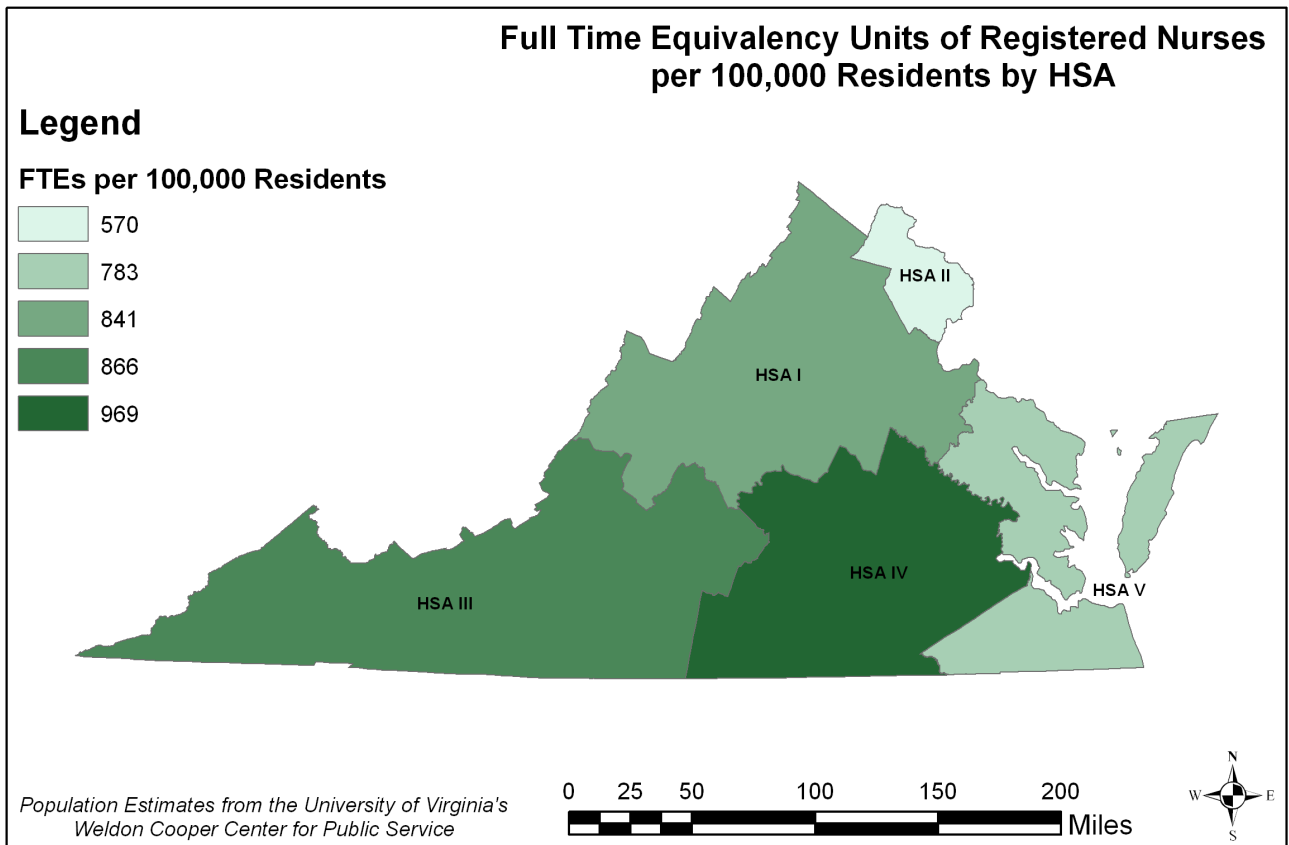
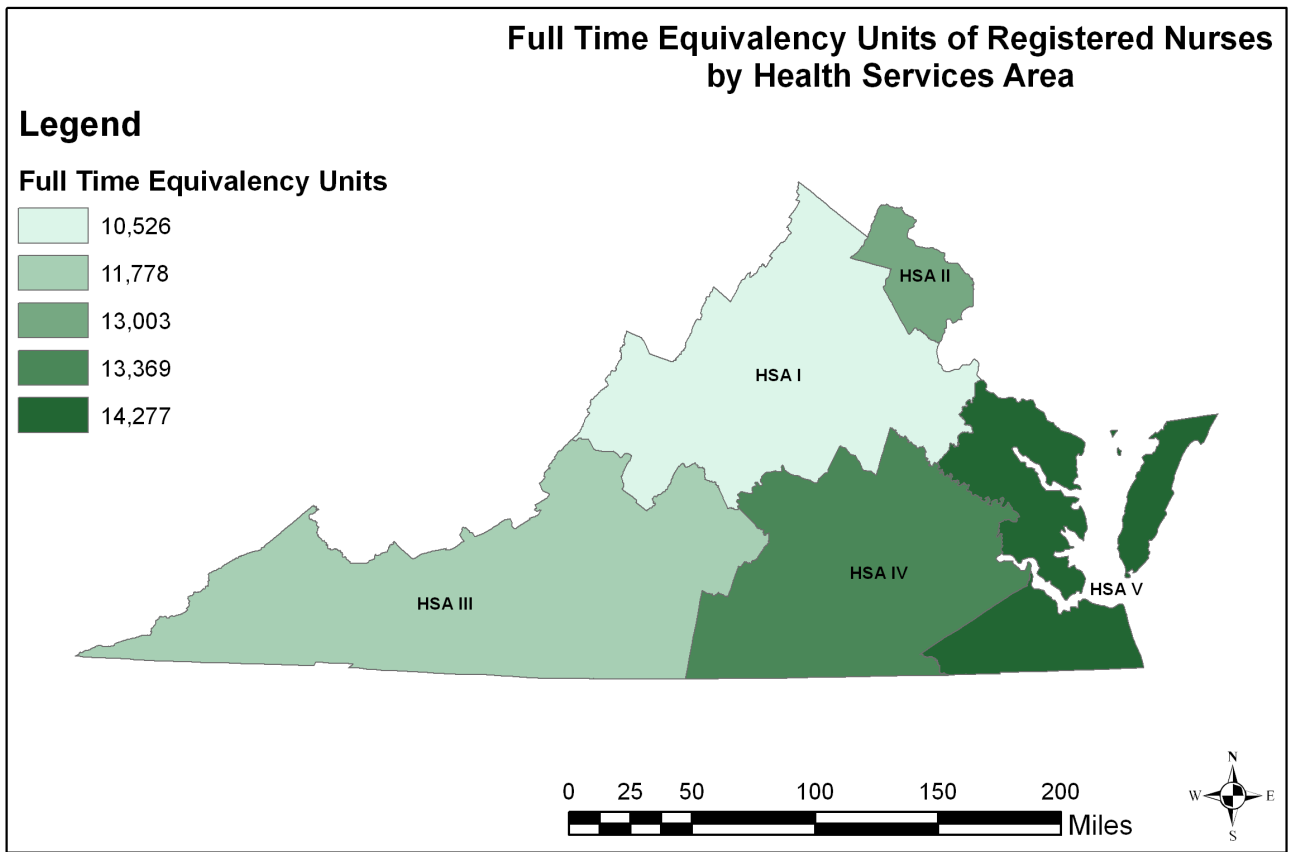
### FTEs per 100,000 Residents

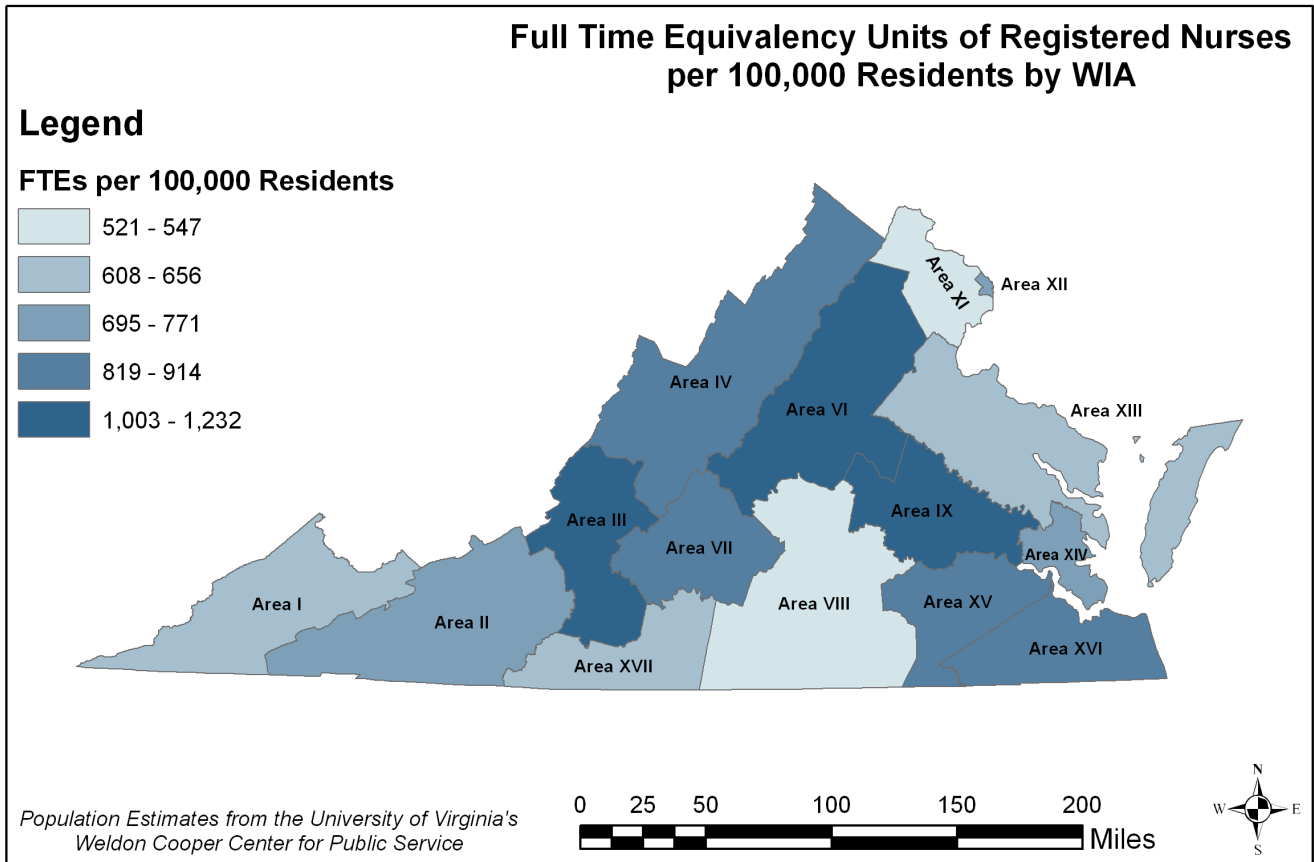
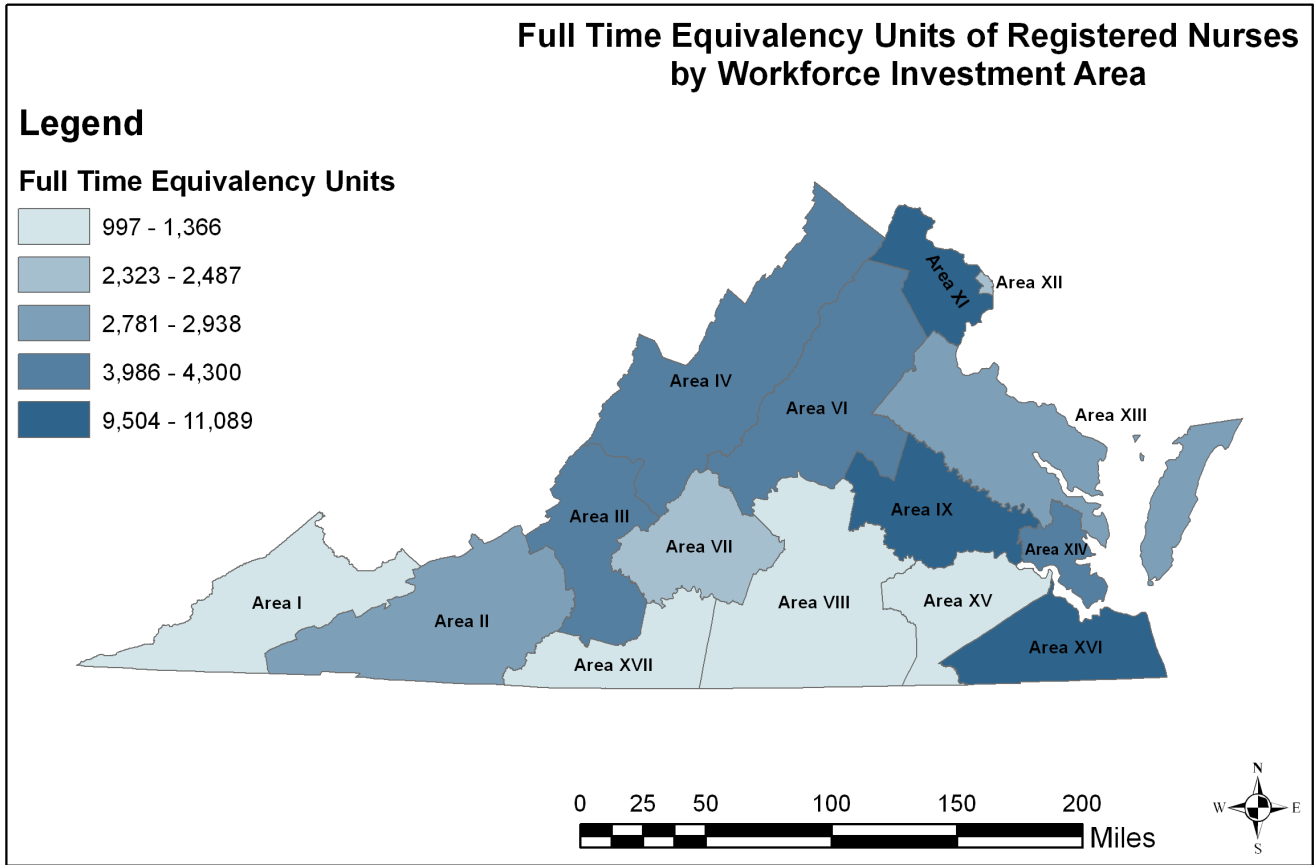
- 191 - 489
- 499 - 720
- 761 - 1,014
- 1,049 - 1,398
- 1,485 - 2,292
- 2,555 - 3,761
- 4,748 - 8,495



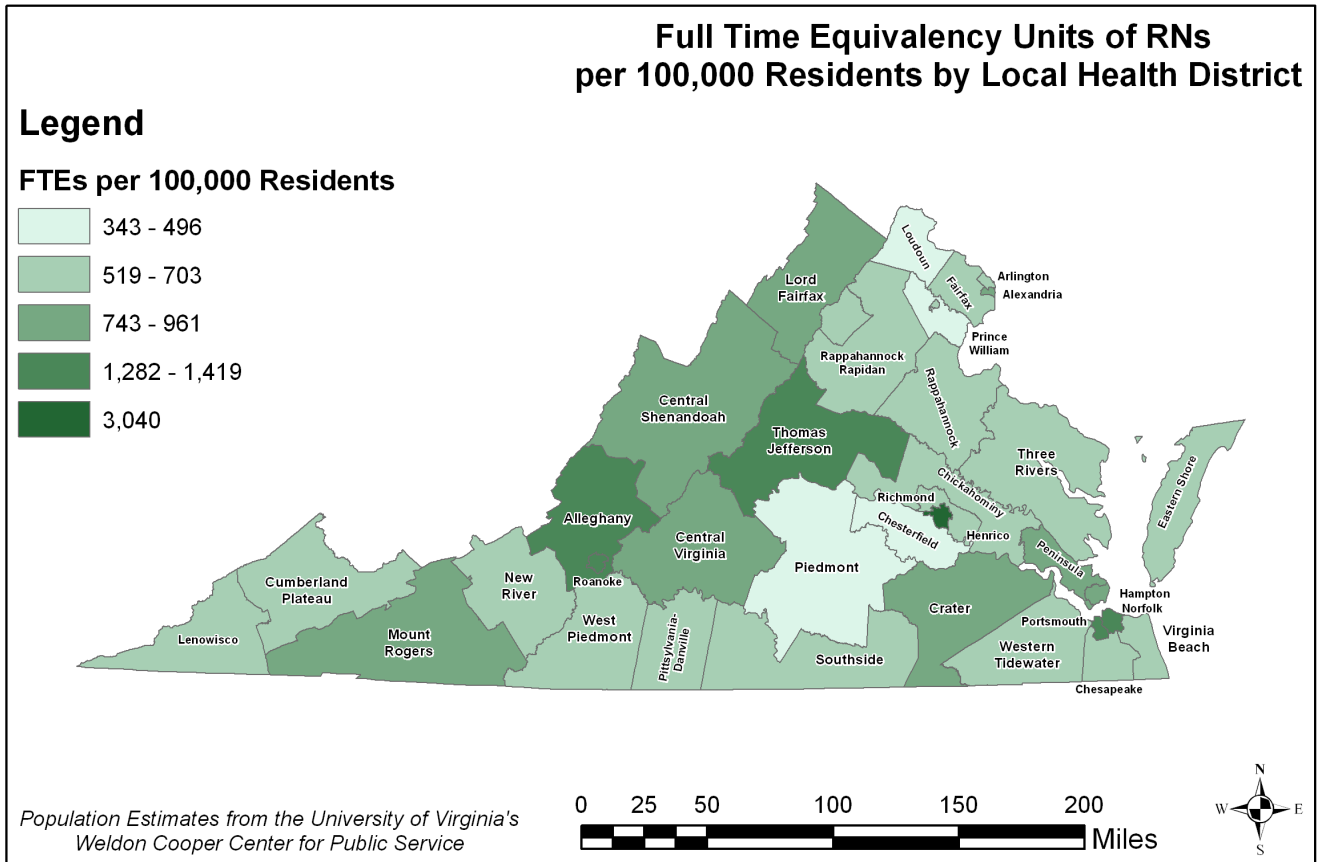
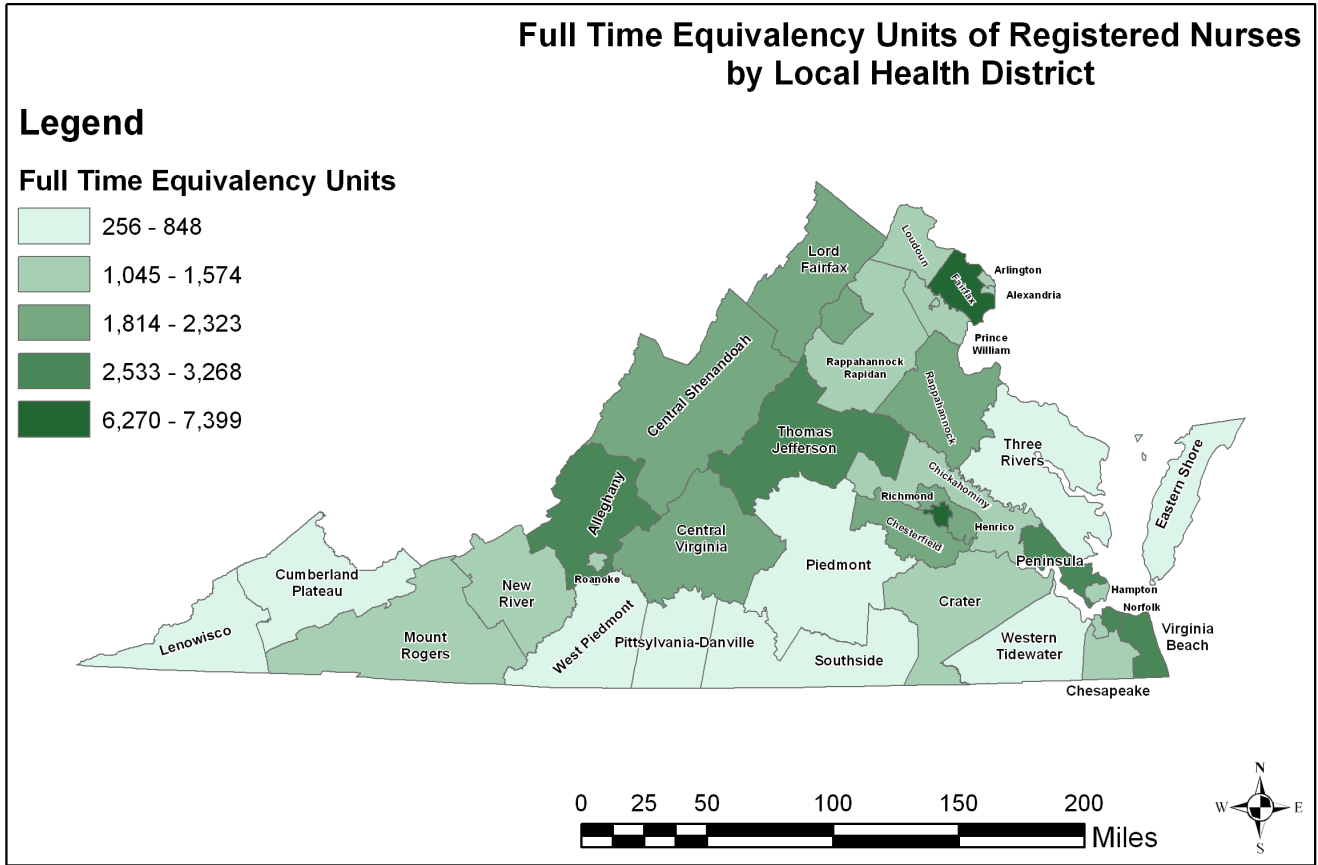
Population Estimates from the University of Virginia's Weldon Cooper Center for Public Service

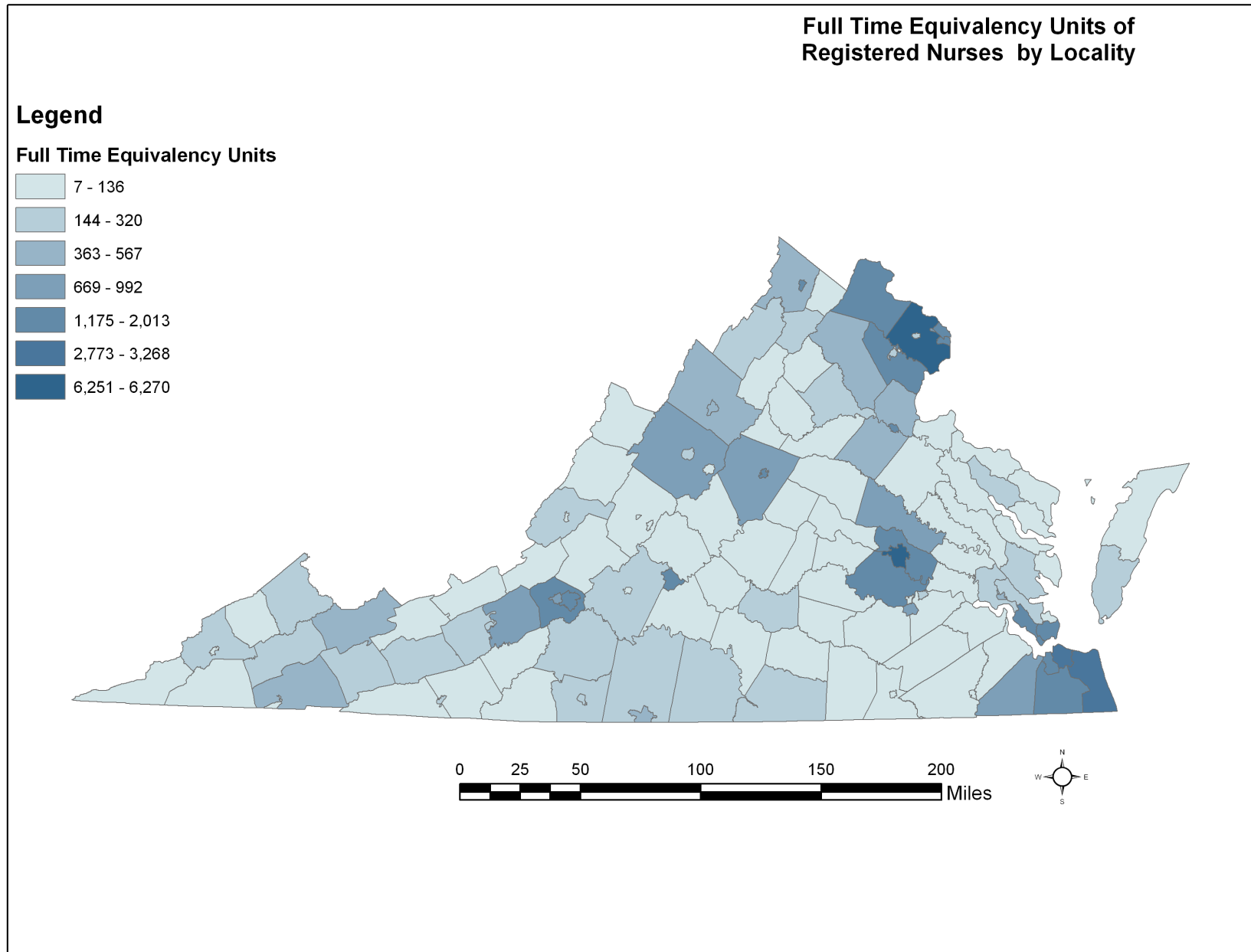








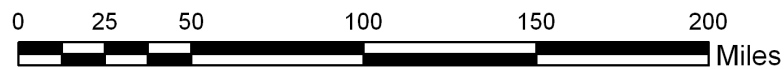
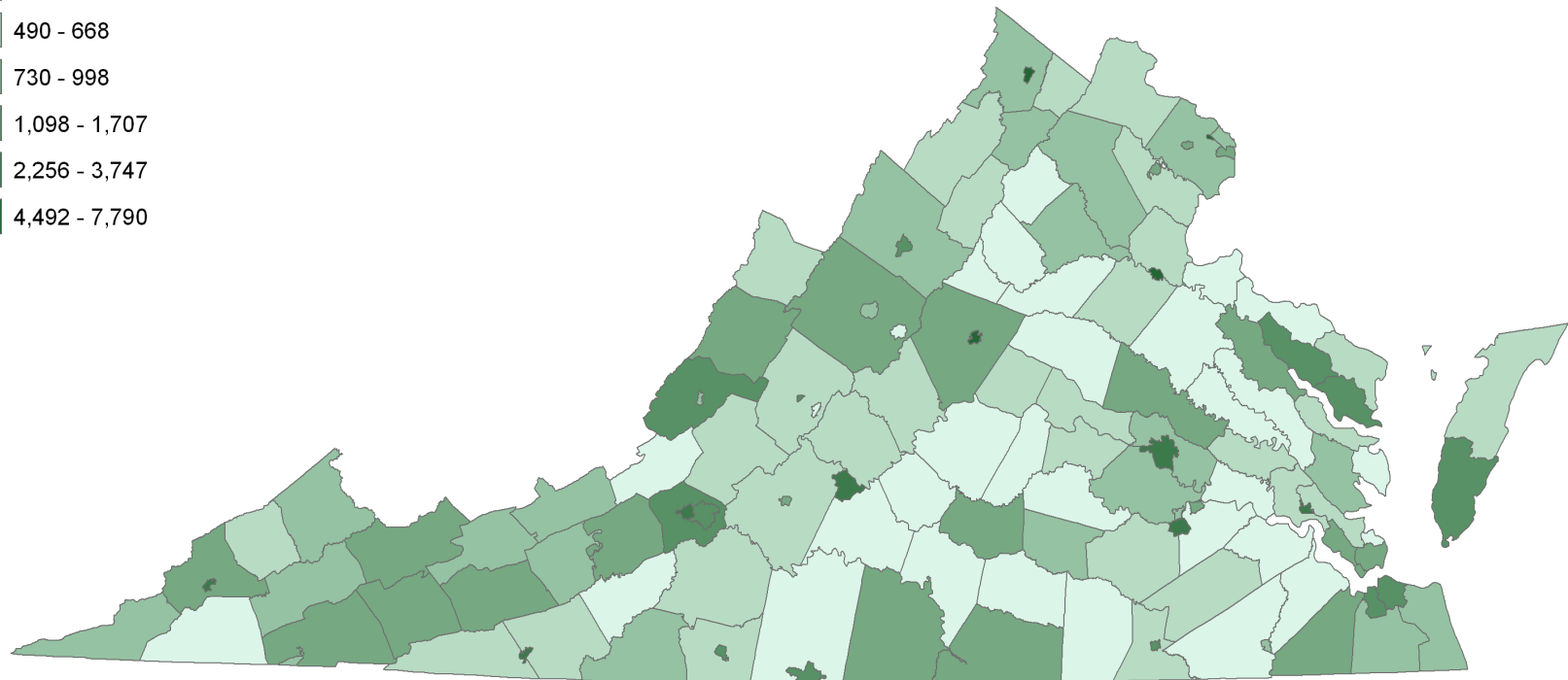
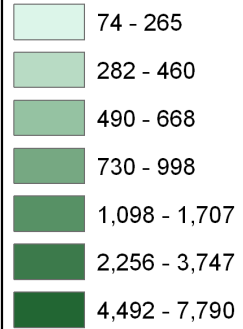




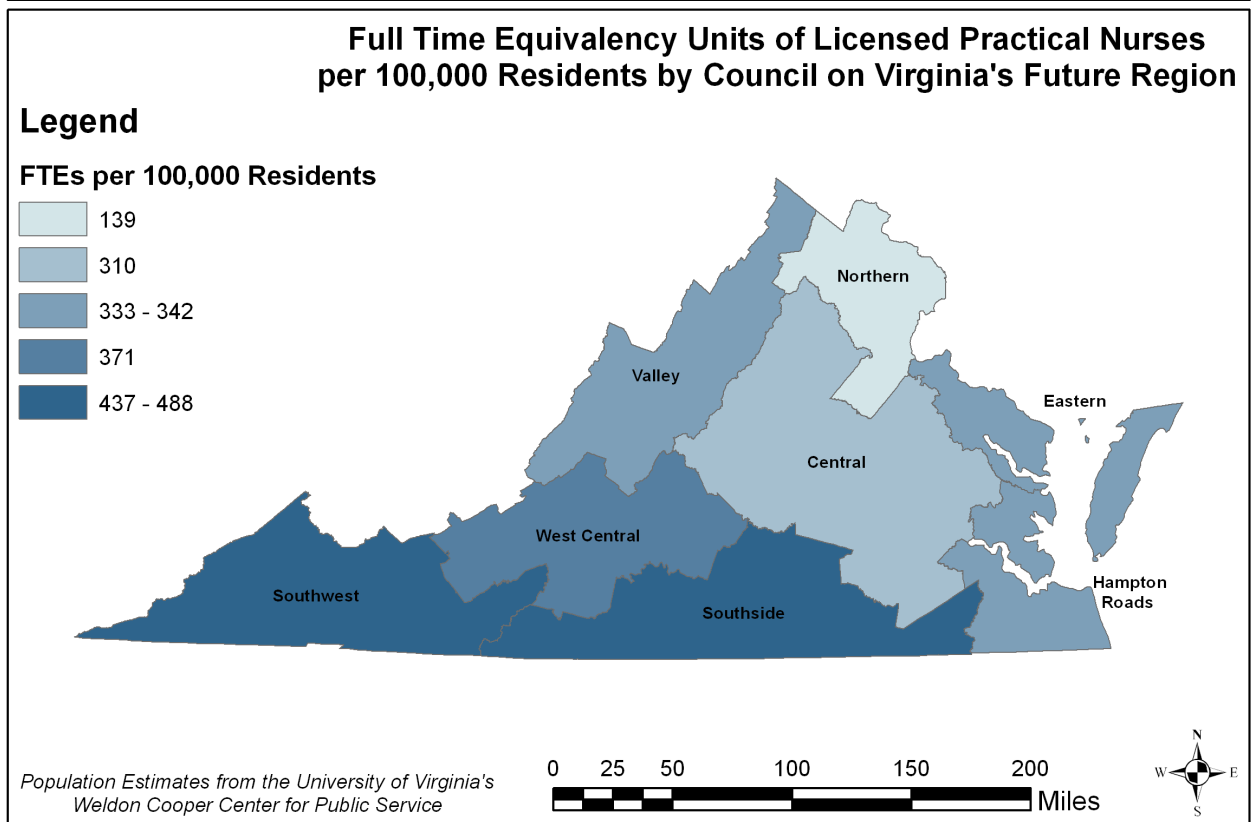
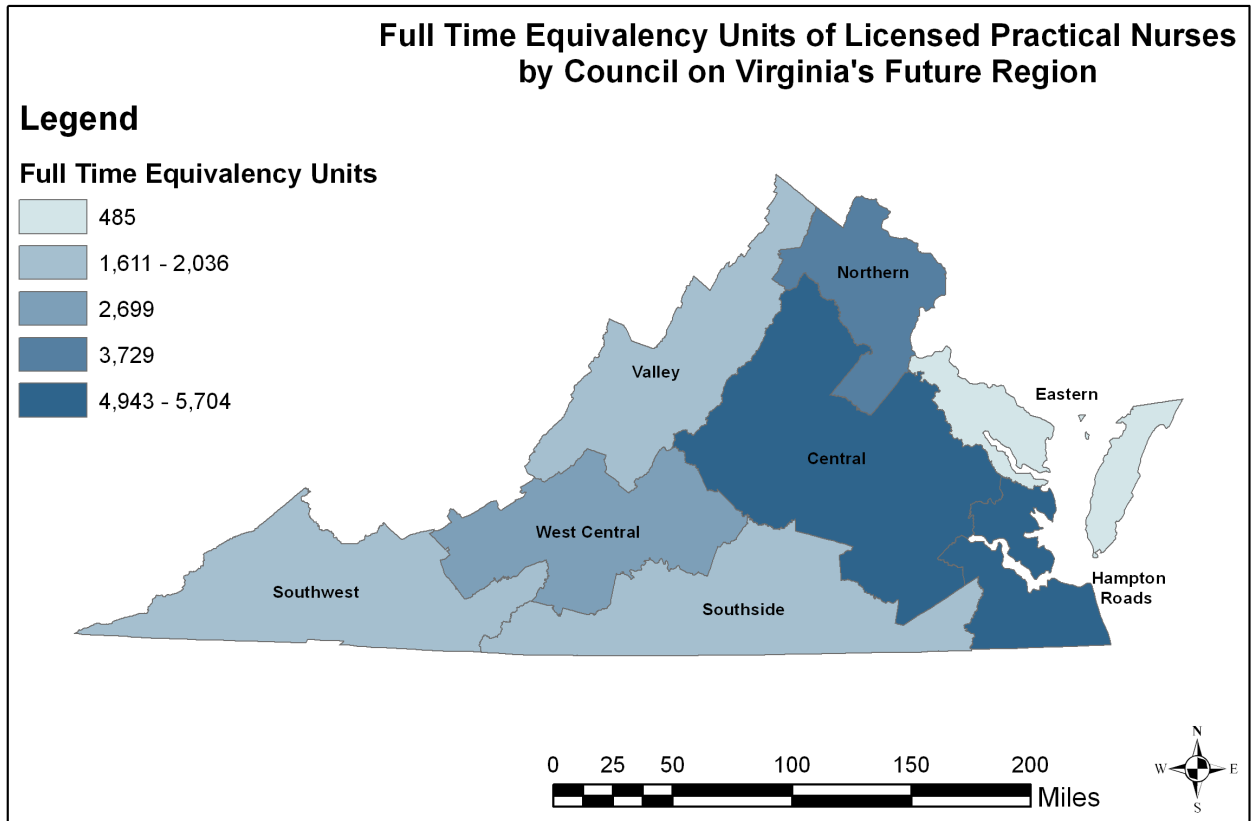
# Full Time Equivalency Units of Registered Nurses per 100,000 Residents by Locality

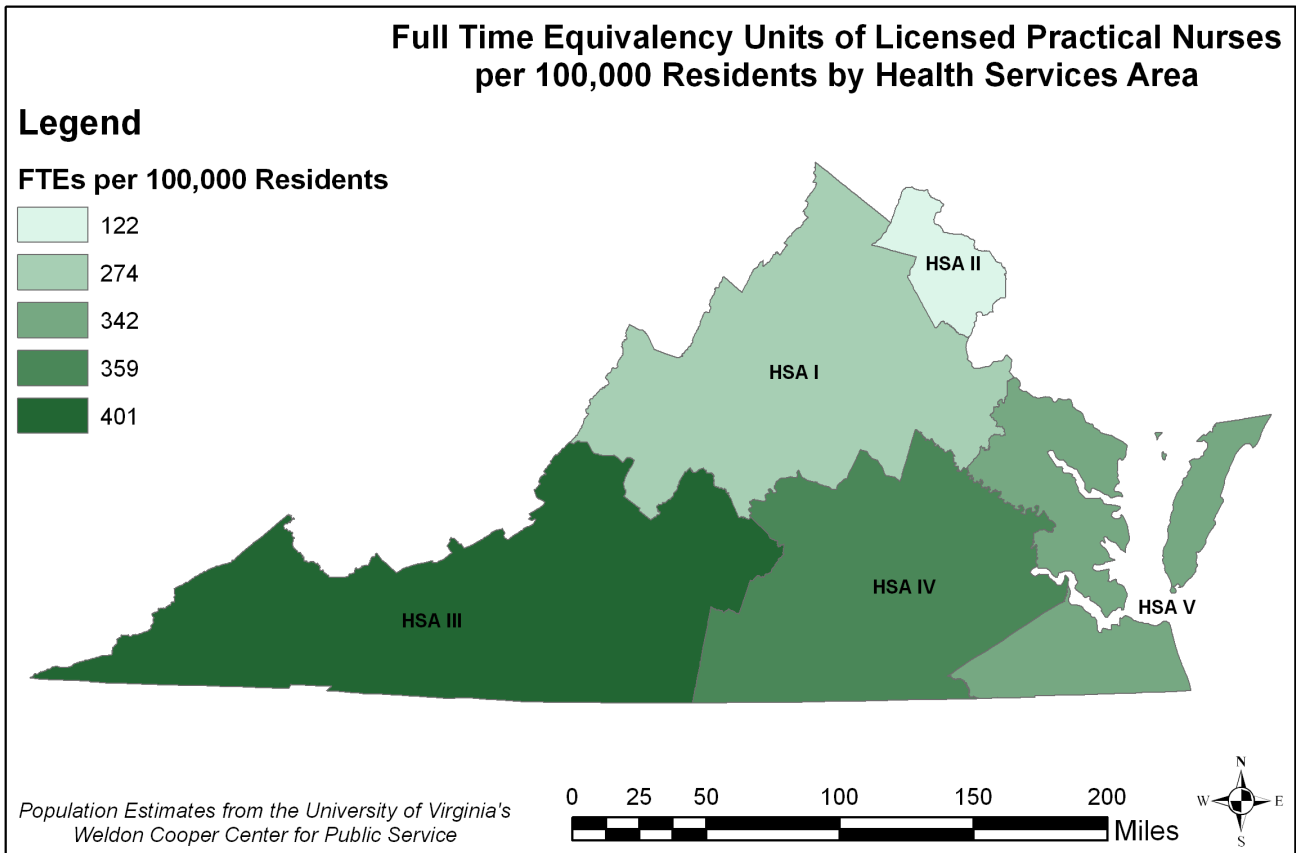
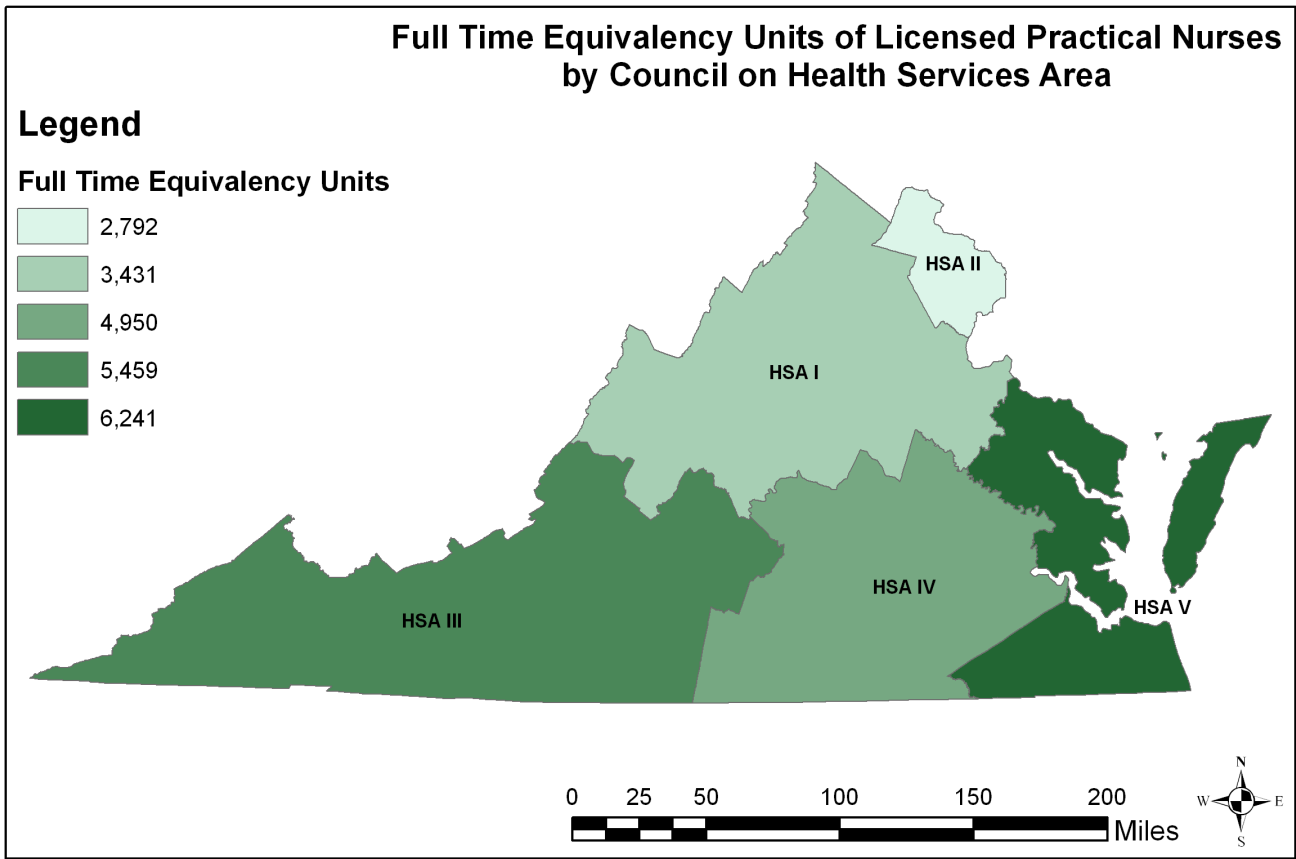
## Legend

### FTEs per 100,000 Residents



*Population Estimates are from the University of Virginia's  
Weldon Cooper Center for Public Service*

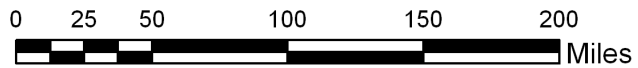
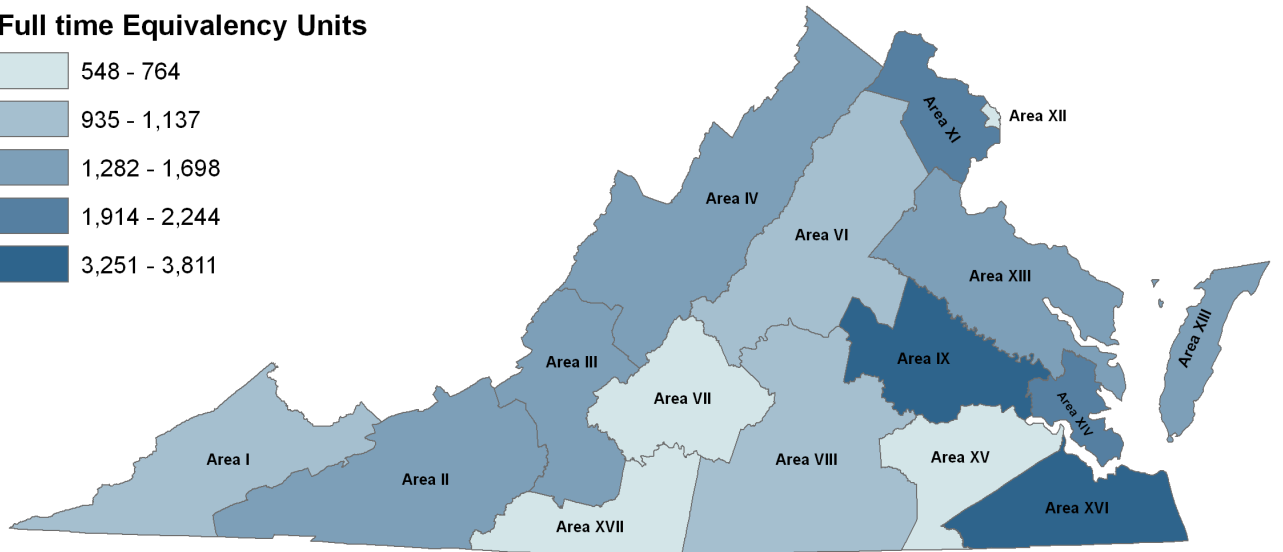
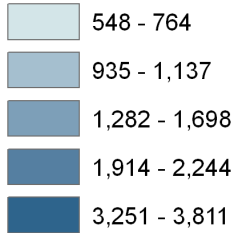




### Full Time Equivalency Units of Licensed Practical Nurses by Workforce Investment Area

#### Legend

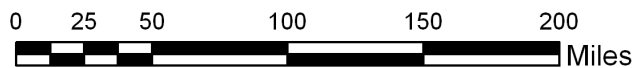
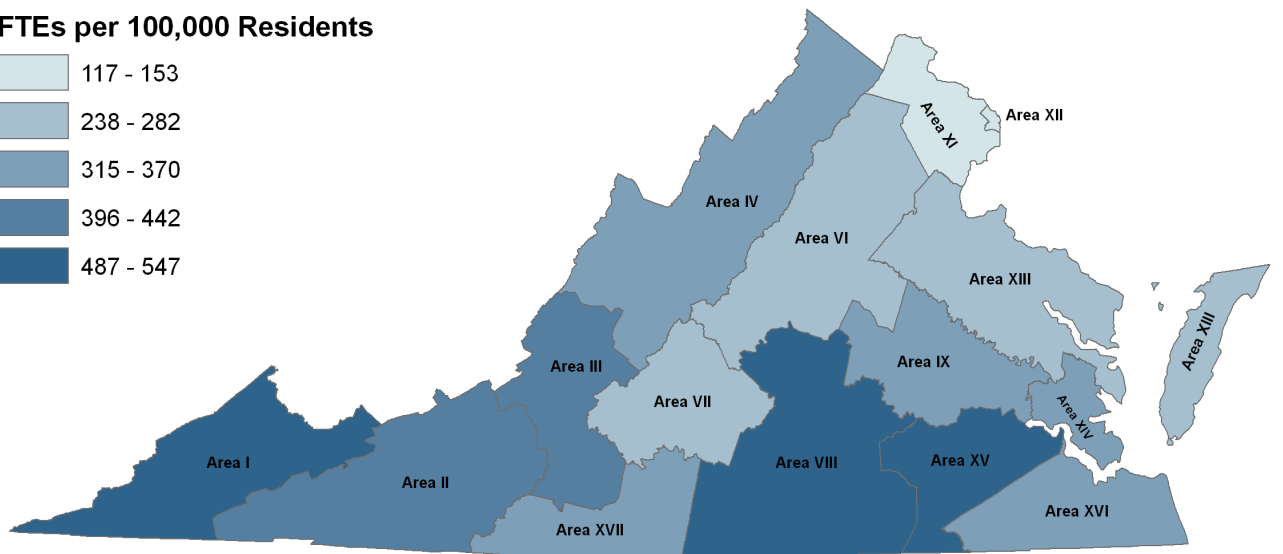
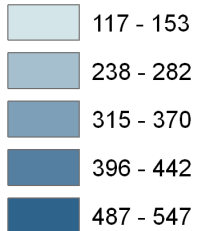
#### Full time Equivalency Units



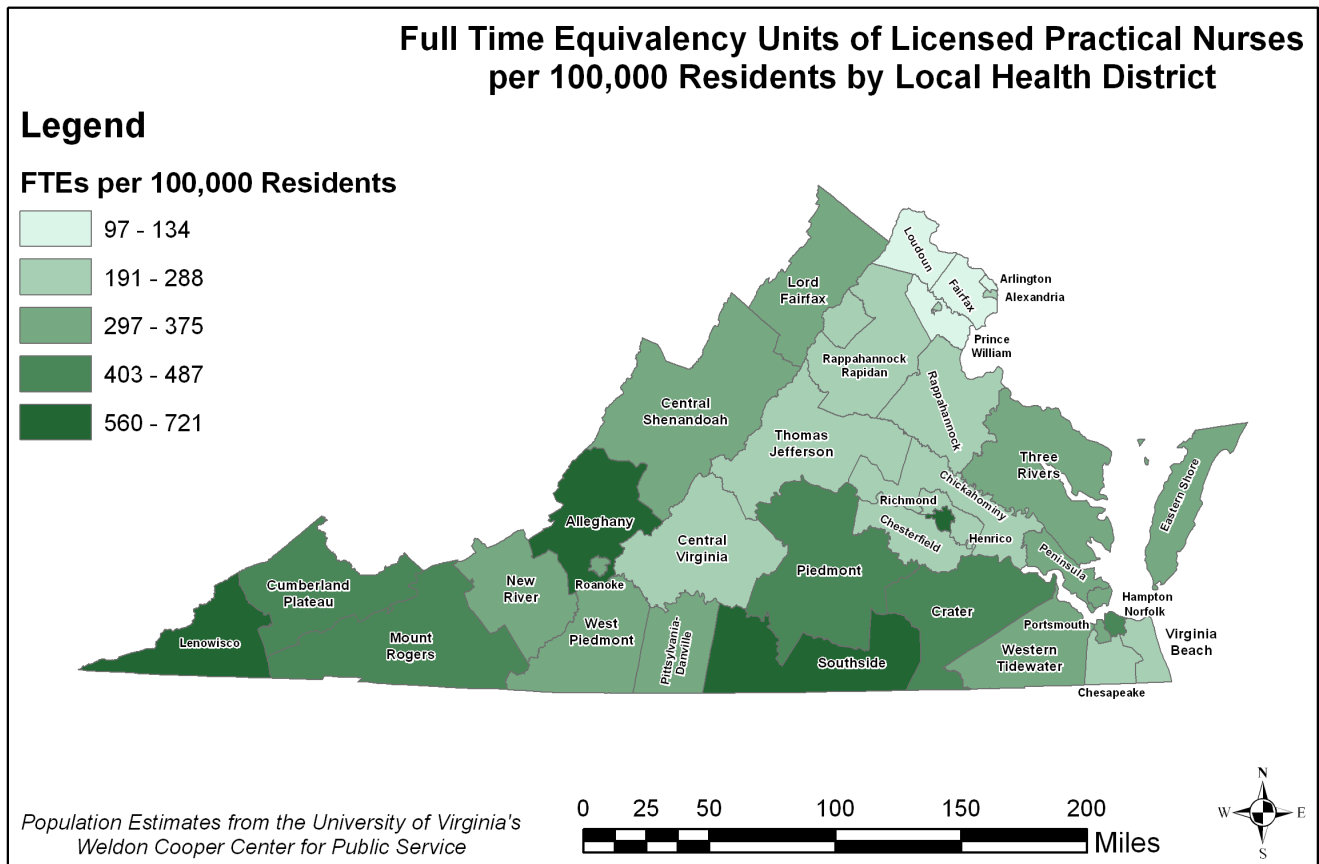
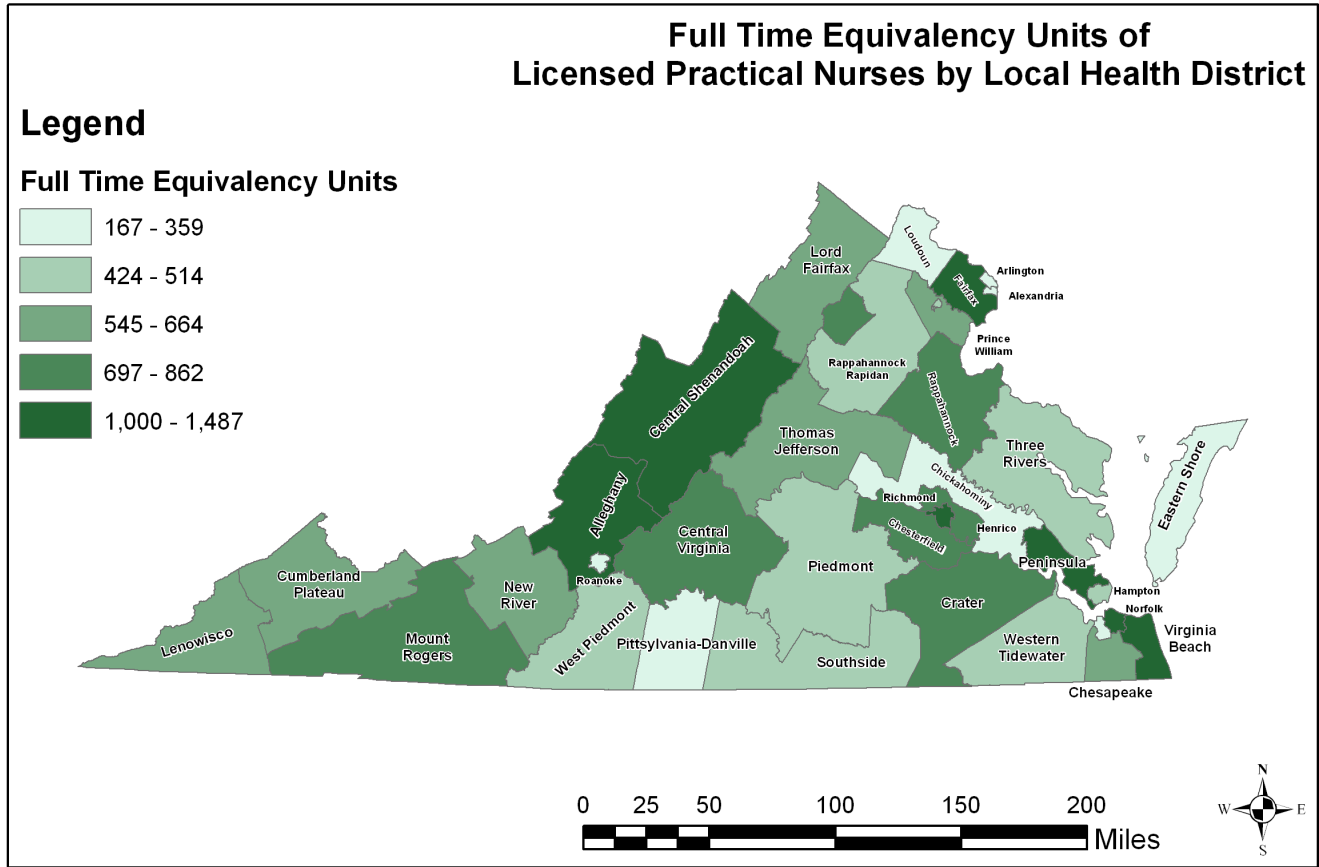
### Full Time Equivalency Units of Licensed Practical Nurses per 100,000 Residents by Workforce Investment Area

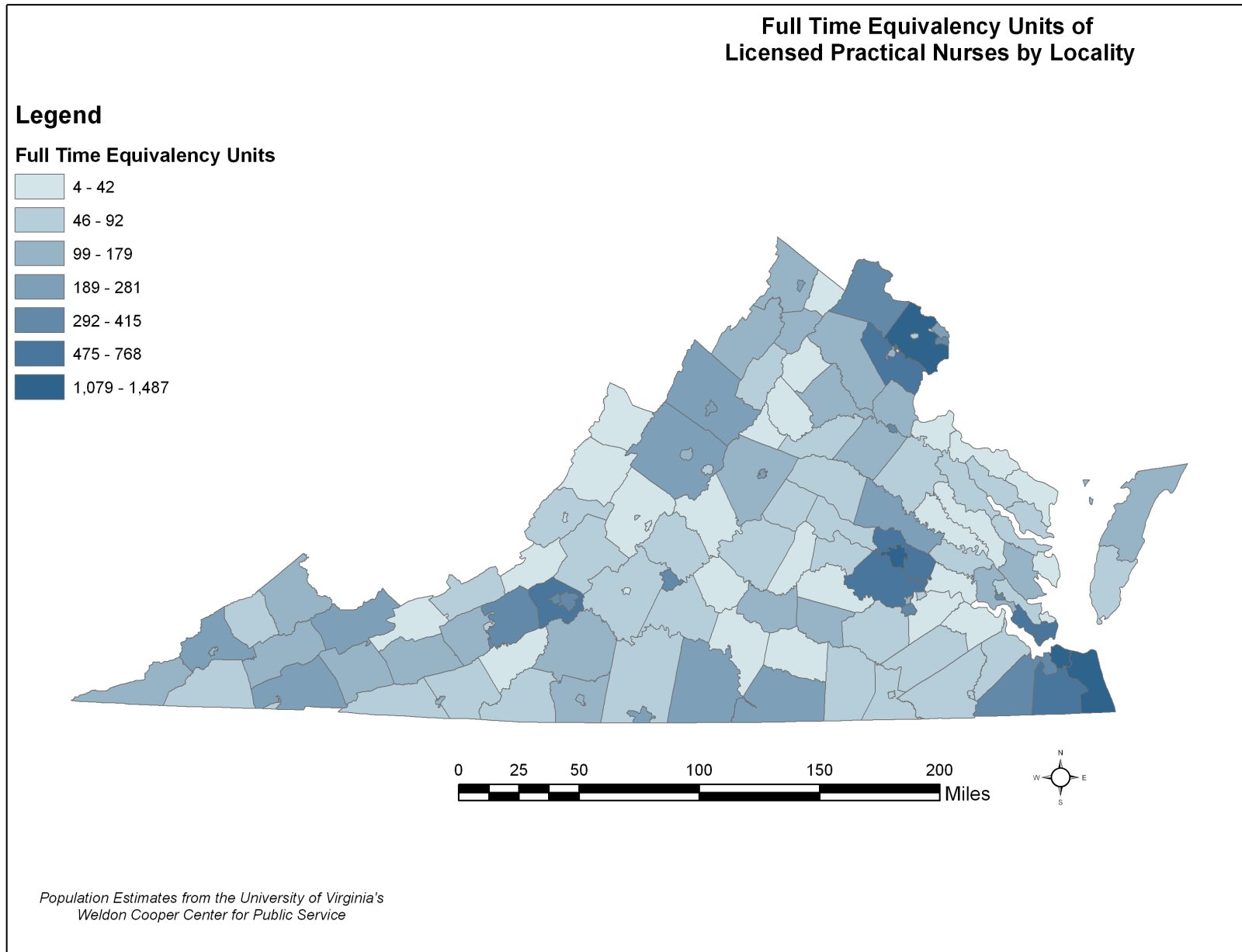
#### Legend

#### FTEs per 100,000 Residents



Population Estimates from the University of Virginia's Weldon Cooper Center for Public Service





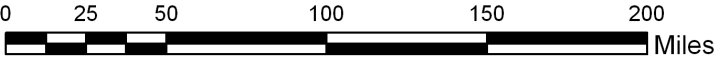
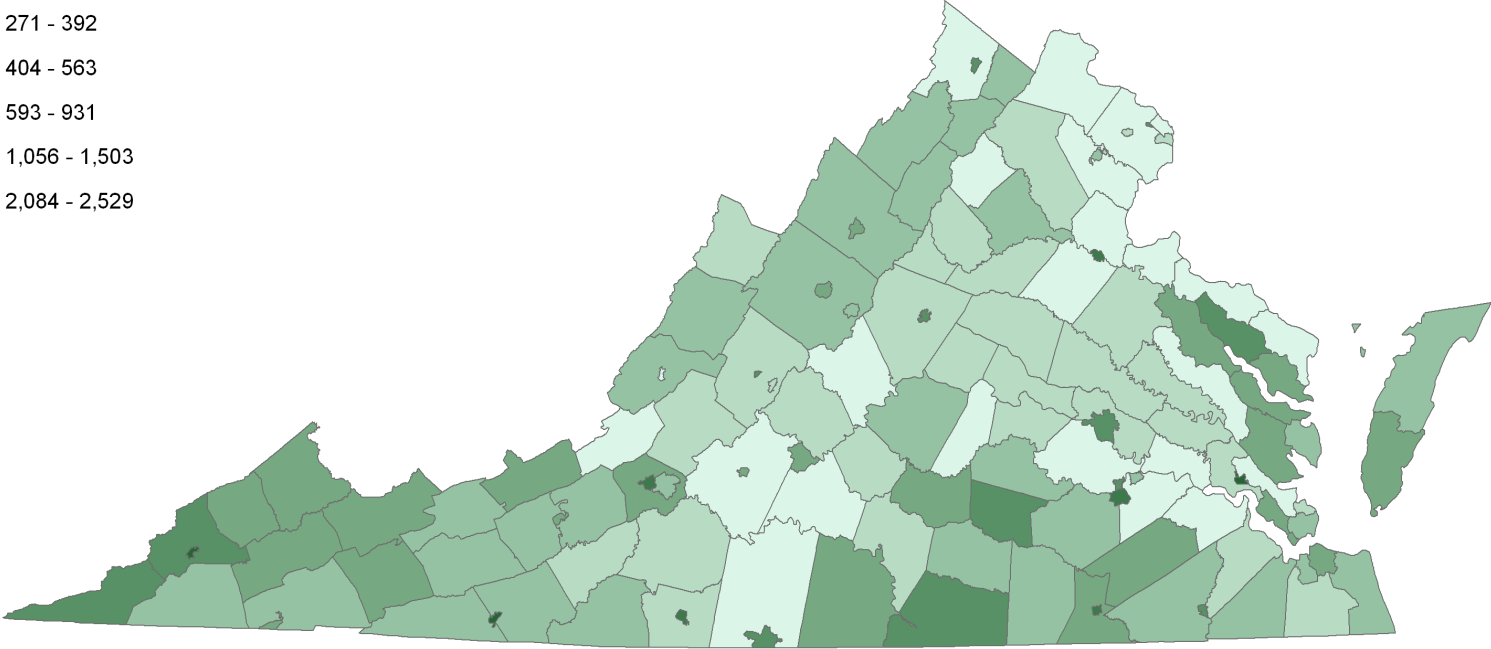


# Full Time Equivalency Units of Licensed Practical Nurses per 100,000 Residents by Locality

## Legend

### FTEs per 100,000 Residents

- 60 - 162
- 167 - 266
- 271 - 392
- 404 - 563
- 593 - 931
- 1,056 - 1,503
- 2,084 - 2,529



Population Estimates from the University of Virginia's  
Weldon Cooper Center for Public Service

## Appendix

### Appendix A: Weights

Final weights were calculated by multiplying the two weights and the overall response rate within each profession:  
 $\text{ageweight} \times \text{ruralweight} \times \text{responserate} = \text{final weight}$ .

#### Registered Nurses

| Age         | Response Rate | Weight      |
|-------------|---------------|-------------|
| 20 to 24    | 17%           | 5.837037037 |
| 25 to 29    | 57%           | 1.76155307  |
| 30 to 34    | 69%           | 1.456359482 |
| 35 to 39    | 74%           | 1.347943723 |
| 40 to 44    | 78%           | 1.275144247 |
| 45 to 49    | 80%           | 1.247668394 |
| 50 to 54    | 82%           | 1.224294039 |
| 55 to 59    | 82%           | 1.221504497 |
| 60 to 64    | 79%           | 1.26942326  |
| 65 to 69    | 71%           | 1.410666667 |
| 70 to 74    | 62%           | 1.624157844 |
| 75 to 79    | 49%           | 2.041158537 |
| 80 and over | 33%           | 2.990049751 |

| Rural Status                       | Response Rate | Weight   |
|------------------------------------|---------------|----------|
| Metro, 1 million+                  | 77%           | 1.296131 |
| Metro, 250,000 to 1 million        | 81%           | 1.2391   |
| Metro, 250,000 or less             | 80%           | 1.251105 |
| Urban pop 20,000+, Metro adj       | 81%           | 1.230562 |
| Urban pop 20,000+, nonadj          | NA            | NA       |
| Urban pop, 2,500-19,999, Metro adj | 79%           | 1.263334 |
| Urban pop, 2,500-19,999, nonadj    | 77%           | 1.304762 |
| Rural, Metro adj                   | 80%           | 1.25641  |
| Rural, nonadj                      | 79%           | 1.271963 |
| Not in Virginia                    | 46%           | 2.155556 |

#### Licensed Practical Nurses

| Age         | Response Rate | Weight   |
|-------------|---------------|----------|
| 20 to 24    | 37%           | 2.717439 |
| 25 to 29    | 55%           | 1.805714 |
| 30 to 34    | 63%           | 1.57661  |
| 35 to 39    | 66%           | 1.503867 |
| 40 to 44    | 70%           | 1.430358 |
| 45 to 49    | 71%           | 1.40893  |
| 50 to 54    | 73%           | 1.364686 |
| 55 to 59    | 72%           | 1.379774 |
| 60 to 64    | 65%           | 1.541771 |
| 65 to 69    | 58%           | 1.73202  |
| 70 to 74    | 43%           | 2.327411 |
| 75 to 79    | 34%           | 2.984252 |
| 80 and over | 24%           | 4.117647 |

| Rural Status                       | Response Rate | Weight   |
|------------------------------------|---------------|----------|
| Metro, 1 million+                  | 64%           | 1.562442 |
| Metro, 250,000 to 1 million        | 69%           | 1.441118 |
| Metro, 250,000 or less             | 71%           | 1.41517  |
| Urban pop 20,000+, Metro adj       | 68%           | 1.472561 |
| Urban pop 20,000+, nonadj          | NA            | NA       |
| Urban pop, 2,500-19,999, Metro adj | 68%           | 1.474035 |
| Urban pop, 2,500-19,999, nonadj    | 69%           | 1.451509 |
| Rural, Metro adj                   | 69%           | 1.450065 |
| Rural, nonadj                      | 67%           | 1.491979 |
| Not in Virginia                    | 43%           | 2.301682 |

## Appendix B: FTE Imputation

---

This iteration of the nursing survey began prior to implementation of our standard survey methodology, and was not designed to estimate FTEs. We used the following ad hoc syntax to estimate FTEs for each nurse. While not perfect, we believe this method provides a better estimate of nursing services supplied than previous methods using counts of licensees by mailing address.

*Working* is a dummy variable indicating if the nurse reported working during the survey period. *PriHours* is an indicator of full-time or part-time hours worked at the primary location. *EmpPositions* is the number of positions reported. *PriLocImp* is the imputed locality of the primary work location. If the locality was not provided, we used the locality of the address of record. *Prof* distinguishes between LPNs and RNs. *MetroStatus* indicates whether the locality is in a Metro or Non-Metro area, as defined by the US Census Bureau. *Age10* is age, in 10-year categories.

```
DO IF (Working = 0).  
  COMPUTE FTE = 0.  
ELSE IF (Missing(PriHours) = 1).  
  COMPUTE FTE = 999.  
ELSE IF ((EmpPositions <= 1 | Missing(EmpPositions) = 1) & PriHours = 1).  
  COMPUTE FTE = 0.5.  
ELSE IF ((EmpPositions <= 1 | Missing(EmpPositions) = 1) & PriHours = 2).  
  COMPUTE FTE = 1.0.  
ELSE IF (EmpPositions = 2 & PriHours = 1).  
  COMPUTE FTE = 1.0.  
ELSE IF (EmpPositions = 2 & PriHours = 2).  
  COMPUTE FTE = 1.5.  
ELSE IF (EmpPositions = 3 & PriHours = 1).  
  COMPUTE FTE = 1.5.  
ELSE IF (EmpPositions = 3 & PriHours = 2).  
  COMPUTE FTE = 2.0.  
END IF.
```

```
SORT CASES BY PriLocImp(A).
```

```
SORT CASES BY Prof MetroStatus Age10.  
SPLIT FILE SEPARATE BY Prof MetroStatus Age10.
```

```
RMV /FTE_1=SMEAN(FTE).
```

## Appendix C: The Nursing Workforce Survey

| Nursing Workforce Survey  |   |
|---|---|
| 1. Please select your sex/gender.   | Male                                    |
|   | Female                                  |
| 2. Please select the menu item that best describes your ethnicity/race.   | White (Non-Hispanic) / Caucasian        |
|   | Black / African American (Non-Hispanic) |
|   | Hispanic / Latino (Puerto Rican)        |
|   | Asian / Pacific Islander                |
|   | American Indian / Alaska Native         |
|   | Two or More Races                       |
|   | Other                                   |
| 2a. Other   | Fill in the blank                       |
| 3. In the USA, in what state do you currently reside?   | List of States                          |
| 4. Are you currently a resident of Virginia?  | Yes/No                                  |
| 5. If you answered yes, please provide your City/County and zip code information:   | List of Counties                        |
| 5a. Zip Code:   | Fill in the blank                       |
| 6. Were you ever employed in any of the following health-related jobs <strong>before</strong> completing your initial nursing education program? (Check all that apply) | No health related position              |
|   | Nursing Aide/Nursing Assistant          |
|   | Home health aide/assistant              |
|   | Licensed Practical Nurse (for RNs)      |
|   | Emergency Medical Technician/Paramedic  |
|   | Medical Assistant                       |
|   | Dental Assistant                        |
|   | Allied Health Technician/Technologist   |
|   | Manager in health care setting          |
|   | Military Medical Corp                   |
|   | Medical Doctor                          |
|   | Midwife                                 |
|   | Other                                   |
| 6a. Other   | Fill in the blank                       |
| 7. If other than the USA, in what country did you receive your most recent nursing education?   | Fill in the blank                       |
| 7a. If received your most recent nursing education in the USA, then please select the state?  | List of States                          |
| 8. Please indicate <strong>all</strong> post high school degrees you have received.   | Associate Degree                        |
|   | Bachelors Degree                        |
|   | Masters Degree                          |
|   | Doctorate                               |
|   | Other                                   |
| 8a. Other   | Fill in the blank                       |
| 9. How did you finance your <strong>initial</strong> nursing education.   | Healthcare employment earnings          |
|   | Non healthcare employment earnings      |
|   | Personal savings                        |
|   | Family Resources                        |

|  |  |
|--|--|
|  | Employer tuition reimbursement               |
|  | Veterans benefits                            |
|  | Federal traineeships, scholarships, or grant |
|  | Federal loans                                |
|  | Other type of loan                           |
|  | State/local government scholarship or grant  |
|  | Non governmental scholarship or grant        |
|  | Other resources                              |
| 10. In your initial nursing education program, were you a part-time or full-time student?  | Full-time                                    |
|  | Part-time                                    |
| 11. What is the highest nursing certificate, diploma, or degree you have received as of today? (Choose only the highest.)                        | LPN Diploma/Certificate                      |
|  | RN Diploma                                   |
|  | Associate Degree                             |
|  | Baccalaureate Degree                         |
|  | Masters degree                               |
|  | Doctorate in Nursing                         |
|  | Doctorate in Nursing Science                 |
|  | Doctorate in Nursing Practice                |
|  | Doctor of Philosophy in Nursing              |
| 12. In your answer above, what was the year of your graduation?  | Fill in the blank                            |
| 13. What type of nursing degree / credential qualified you for your first license in the USA?  | LPN diploma or certificate                   |
|  | Hospital RN diploma                          |
|  | Associate degree in nursing                  |
|  | Baccalaureate degree in nursing              |
|  | Masters degree in nursing                    |
|  | Doctoral degree in nursing                   |
| 14. What is the highest level of non-nursing education you have attained to date? (Choose the highest education you have completed as of today.) | High School diploma or GED                   |
|  | Associates degree                            |
|  | Baccalaureate degree                         |
|  | Masters degree                               |
|  | Doctorate                                    |
| 15. Are you currently enrolled in a nursing education program leading to an advanced degree.   | Yes/No                                       |
| 16. In what state were you issued your first nursing license/certificate?  | List of States                               |
| 17. In what year were you issued your first nursing license?   | Fill in the blank                            |
| 18. Which type of nursing degree or nursing credential qualified you for your first license?   | Diploma Program                              |
|  | Associate Degree                             |
|  | Bachelors Degree                             |
|  | Masters Degree                               |
|  | Doctorate                                    |
|  | Other  |
| 18a. Other   | Fill in the blank                            |
| 19. In what year did you complete this nursing program?  | Fill in the blank                            |

|   |   |
|---|---|
| 20. In which state (including the District of Columbia), was this program located?  | List of States  |
| 20a. If the program was completed outside of the states please list the US territory or foreign country.  | Fill in the blank   |
| 21. Indicate the type of nursing license you currently hold: (Choose all that apply.) Note: All Advance Practice nurses should select Active or Inactive RN.          | Active RN license   |
|   | Inactive RN license   |
|   | Active LPN license  |
|   | Inactive LPN license  |
| 22. If you currently hold both an active RN license and an active LPN license, please indicate which license you are practicing under at this time: (Choose only one) | Practicing as an RN   |
|   | Practicing as an LPN  |
|   | Currently not practicing as a nurse                         |
| 23. <strong>Nurse Practitioners:</strong> Are you currently licensed by the state of Virginia as a Nurse Practitioner?  | Fill in the blank   |
| 24. If you answered yes, please indicate the type of role for which you are licensed in Virginia. (Choose all that apply.)  | Certified Nurse Midwife                                     |
|   | Certified Registered Nurse Anesthetist                      |
|   | Nurse Practitioner - Acute Care                             |
|   | Nurse Practitioner - Adult                                  |
|   | Nurse Practitioner - Emergency Room                         |
|   | Nurse Practitioner - Family                                 |
|   | Nurse Practitioner - Family Planning                        |
|   | Nurse Practitioner - Geriatric                              |
|   | Nurse Practitioner - Medical                                |
|   | Nurse Practitioner - Neonatal                               |
|   | Nurse Practitioner - OB/GYN                                 |
|   | Nurse Practitioner - Pediatric                              |
|   | Nurse Practitioner - Psychiatric and Mental Health          |
|   | Nurse Practitioner - Womens Health                          |
|   | Licensed in multiple advanced practice roles                |
| 25. <strong>Clinical Nurse Specialists:</strong> Are you currently registered with the Virginia Board of Nursing as a Clinical Nurse Specialist?                      | NULL  |
| <strong>Employment Status</strong><br>26. What is your current employment status? (Choose the response that best fits your situation.)                                | Actively employed in nursing - full time                    |
|   | Actively employed in nursing - part time                    |
|   | Actively employed in nursing - per diem                     |
|   | Working in nursing only as a volunteer                      |
|   | Actively employed in a field other than nursing - full time |
|   | Actively employed in a field other than nursing - part time |
|   | Actively employed in a field other than Nursing - per diem  |
|   | Unemployed - seeking work as a nurse                        |
|   | Unemployed - not seeking work as a nurse                    |

|   |   |
|---|---|
|   | Out of the workforce temporarily                                    |
|   | Disabled  |
|   | Retired   |
| <strong>Please Note: If you are employed in a non-nursing position, unemployed, retired, or disabled, please skip the following employment questions. GO TO Question 40.</strong><br>27. How many paid positions do you currently hold as a nurse?                  |   |
|   | 0   |
|   | 1   |
|   | 2   |
|   | 3 or more   |
| 28. In a typical week, how many hours do you work in all of your paid nursing positions?  | Fill in the blank   |
| 29. In a week, how many hours do you volunteer your services as a nurse? Enter a value of zero if appropriate. <i>If you only volunteer a few times per year, add up the total hours in a year and divide by 52 to get a weekly amount. Round to the nearest wh</i> | Fill in the blank   |
| 30. Including both your paid employment (if any) and your volunteer time (if any), how many hours of direct patient care do you provide in a typical week?  | Fill in the blank   |
| <i>Each of the next questions is about your primary place of employment, or volunteer nursing area if you are not employed. Your primary position is the one where you spend the most time each month as a nurse, regardless of whether you provide direct pat</i>  | List of Counties  |
| 31a. State:   | List of States  |
| 31b. Zip Code:  | Fill in the blank   |
| 32 How long have you worked in your current nursing position?   | Less than 6 months  |
|   | 6 months to 1 year  |
|   | 1 to 2 years  |
|   | 2 to 5 years  |
|   | 5 to 10 years   |
|   | More than 10 years  |
| 33. Please identify the title that most closely corresponds to your primary employment position:  | Traveling nurse   |
|   | Staff nurse   |
|   | Manager   |
|   | Administrator / Executive   |
|   | Consultant  |
|   | Researcher  |
|   | Educator  |
|   | Clinical Nurse Specialist   |
|   | Certified Nurse Midwife   |
|   | Certified RN Anesthetist  |
|   | Nurse Practitioner  |
|   | Other   |
| 33a. Other  | Fill in the blank   |
| 34. Please identify the type of setting that most closely corresponds to your primary employment position:  | Hospital in-patient unit  |
|   | Hospital out-patient unit   |
|   | Hospital - other  |
|   | Nursing Home / Extended Care (nursing home, rehab, assisted living) |

|  |  |
|--|--|
|  | Home care agency   |
|  | Hospice  |
|  | Physician Office   |
|  | Public health agency   |
|  | Federally-funded health clinic   |
|  | Ambulatory care (medical practice, urgent care, HMO, surgical center, dental practice, etc.) |
|  | Mental health / substance abuse agency   |
|  | Occupational health site   |
|  | School health service (including college level)  |
|  | Academic education program   |
|  | Insurance / Case management company  |
|  | Policy, Planning or Regulatory agency  |
|  | Military base or facility  |
|  | Corrections facility   |
|  | Other  |
| 34a. Other   | Fill in the blank  |
| 35. Please identify the specialty area that most closely corresponds to your area of practice in your primary employment position:                           | Acute care / critical care   |
|  | Adult health   |
|  | Anesthesia   |
|  | Community health   |
|  | Public health  |
|  | Family health  |
|  | Geriatrics / Gerontology   |
|  | Maternal-Child health / Womens health  |
|  | Nurse Midwifery  |
|  | Medicine / Surgery   |
|  | Occupational health  |
|  | Oncology   |
|  | Palliative care  |
|  | Pediatrics   |
|  | Neonatal care  |
|  | Mental health / Substance Abuse  |
|  | Rehabilitation   |
|  | Student health   |
|  | Trauma   |
|  | Dialysis   |
|  | Informatics  |
|  | Quality improvement  |
|  | Case management  |
|  | Policy / Regulation  |
|  | Other  |
| 35a. Other   | Fill in the blank  |
| 36. Select the response that best describes the total hours that you work in direct patient care in a typical work week at your primary place of employment. | 32 or more   |



|  |  |
|--|--|
|  | Less than 32 hours   |
| 37. Overall how satisfied are you with your current primary care position?   | Very Satisfied   |
|  | Somewhat Satisfied   |
|  | Somewhat dissatisfied  |
|  | Very Dissatisfied  |
| 38. Within the past year, have you received or provided emergency preparedness training in any of the following areas? (Mark all that apply.)  | None   |
|  | Chemical accident or attack  |
|  | Nuclear/radiological accident or attack                                    |
|  | Infectious disease epidemics   |
|  | Biological accident or attack  |
|  | Natural disaster   |
|  | Other public health emergencies  |
| 39. Indicate which of these actions you plan to take in the next 5 years:  | Increase the number of hours I work or volunteer as a nurse                |
|  | Reduce the number of hours I work or volunteer as a nurse                  |
|  | Maintain the same number of hours I currently work or volunteer as a nurse |
|  | Stop practicing as a nurse entirely, but not retire                        |
|  | Retire   |
| <strong>NOT EMPLOYED IN NURSING:</strong> Please answer the following questions if you are currently not employed in a nursing position.<BR>40. Do you plan on seeking employment in a nursing position? | Yes/No   |
| 41. Are you looking for a Full-time or Part-time position in nursing?  | Full-time  |
|  | Part-time  |
|  | Not applicable   |
| 42. If yes, when will you be seeking employment in nursing?  | Within 6 months  |
|  | 1 to 2 years   |
|  | 2 to 5 years   |
|  | 5 to 10 years  |
|  | More than 10 years   |

## Appendix D: The 2012-2013 Nursing Workforce Survey

While striving to maintain continuity, the HWDC continuously improves its surveys based on results of previous surveys. The HWDC has adopted a standard survey template to serve as the basis of all of its workforce surveys. The 2012-2013 Nursing Survey incorporates standard survey template and includes elements specific to the Nursing profession. Please note that the survey appears online through our licensing renewal system. The final visual appearance of the survey for practitioners is dictated by this system. The HWDC may make additional changes before implementing the 2012-2013 survey.

| <b>Nursing Survey</b>   |   |   |
|---|---|---|
| <b>Instructions:</b>  |   |   |
| The following survey will assist policymakers at the state, federal and local levels assess the adequacy of the current nursing workforce and project future workforce trends in relation to Virginia's changing population and health needs. It will help us advance the practice of nursing and to improve the health of all Virginians. By law, information collected as part of this survey is confidential. License numbers and other individually identifying information are removed from Healthcare Workforce Data Center data sets. The Healthcare Workforce Data Center only releases information in the aggregate or to qualified research organizations who meet our strict confidentiality standards. Participation in this survey is voluntary. |   |   |
| The survey questions are designed to allow comparisons across professions, and among state and federal data collection efforts. Some of the questions, particularly the questions pertaining to race and ethnicity, match Federal data collection standards.  |   |   |
| <b>Education and Background</b>   |   |   |
| 1)  | Year of Birth:  | <i>Dropdown: 1996 to 1920 (reverse order)</i> |
| 2)  | Sex:  | <i>Dropdown: Male/Female</i>                  |
|   | Please select the items that best describe your race/ethnicity. Please answer both question 3a about Hispanic origin and 3b about race/ethnicity. |   |
| 3a)   | Select one:   | <i>Check one</i>                              |
|   |   | Hispanic, Latino or Spanish Origin            |
|   |   | Not Hispanic, Latino or Spanish Origin        |
| 3b)   | Select all that apply:  | <i>Check all that apply</i>                   |
|   |   | White   |
|   |   | Black or African American                     |
|   |   | American Indian or Alaska Native              |
|   |   | Asian   |
|   |   | Native Hawaiian or Pacific Islander           |
|   |   | Some other race                               |
| 3c)   | If some other race, please specify:   | <i>Fill in the blank</i>                      |
| 4)  | Where did you graduate from high school (Secondary School)?   | <i>Dropdown</i>                               |
|   |   | Outside of the US or Canada                   |
|   |   | Canada  |
|   |   | 57 US States and Territories                  |
| 5)  | Was your childhood spent mostly in rural, urban or suburban areas?  | <i>Dropdown: urban, rural, suburban</i>       |

|     |   |  |
|-----|---|--|
| 6)  | What type of degree program initially qualified you to practice nursing?  | <i>Dropdown</i>                        |
|     |   | LPN/LVN Diploma or Certificate Program |
|     |   | Hospital RN Diploma                    |
|     |   | Associate degree in nursing            |
|     |   | Baccalaureate degree in nursing        |
|     |   | Masters degree in nursing              |
| 7)  | Where did you obtain the degree that initially qualified you to practice nursing?                                       | <i>Dropdown</i>                        |
|     |   | Outside of the US or Canada            |
|     |   | Canada                                 |
|     |   | 57 US States and Territories           |
| 8)  | Please indicate the highest level of nursing education you have completed as of today:                                  | <i>Dropdown</i>                        |
|     |   | LPN/LVN Diploma or Certificate Program |
|     |   | Hospital RN Diploma                    |
|     |   | Associate degree in nursing            |
|     |   | Baccalaureate degree in nursing        |
|     |   | Masters degree in nursing              |
|     |   | Doctorate in nursing                   |
|     |   | Doctorate in nursing science           |
|     |   | Doctorate in nursing practice          |
|     |   | Doctor of Philosophy in nursing        |
| 9)  | Have you attained any non-nursing degrees or educational certificates? Please indicate your highest non-nursing degree. | <i>Dropdown</i>                        |
|     |   | No, all of my degrees are in nursing   |
|     |   | Yes, an undergraduate certificate      |
|     |   | Yes, an associate degree               |
|     |   | Yes, a baccalaurate degree             |
|     |   | Yes, a post-graduate certificate       |
|     |   | Yes, a masters degree                  |
|     |   | Yes, a doctorate degree                |
| 10) | Please indicate any current active licenses you hold from Virginia as of today:   | <i>Check All That Apply</i>            |
|     |   | Licensed Practical Nurse               |
|     |   | Registered Nurse                       |
|     |   | Clinical Nurse Specialist              |
|     |   | Certified Nurse Midwife                |
|     |   | Licensed Nurse Practitioner            |
|     |   | Certified Massage Therapist            |
|     |   | Respiratory Therapist                  |
| 11) | Do you hold an active license to practice nursing in any other jurisdiction?  | <i>Check all that apply</i>            |
|     |   | District of Columbia                   |
|     |   | Kentucky                               |

|      |   |                              |
|------|---|------------------------------|
|      |   | Maryland                     |
|      |   | North Carolina               |
|      |   | Tennessee                    |
|      |   | West Virginia                |
|      |   | One or more other US states  |
|      |   |                              |
| 12)  | Please select the choice that best describes any primary area of specialization, training or experience you may have:   | <i>Dropdown</i>              |
|      |   | General Nursing/No Specialty |
|      |   | Acute/critical care          |
|      |   | Administration/Management    |
|      |   | Adult health                 |
|      |   | Anesthesia                   |
|      |   | Case management              |
|      |   | Community health             |
|      |   | Family health                |
|      |   | Geriatrics/gerontology       |
|      |   | Informatics                  |
|      |   | Maternal/Womens health       |
|      |   | Medical/surgical             |
|      |   | Neonatal care                |
|      |   | Nurse Midwifery              |
|      |   | Occupational health          |
|      |   | Oncology                     |
|      |   | Palliative care              |
|      |   | Pediatrics                   |
|      |   | Policy/Regulation            |
|      |   | Psychiatric mental health    |
|      |   | Public health                |
|      |   | Quality improvement          |
|      |   | Rehabilitation               |
|      |   | Renal health/dialysis        |
|      |   | Student health               |
|      |   | Substance abuse              |
|      |   | Trauma                       |
|      |   | Other Specialty Area         |
|      |   |                              |
| 12b) | If you selected "other specialty area", please provide a brief description:   | <i>Open-ended</i>            |
|      |   |                              |
| 13)  | Please select the choice that best describes any secondary area of specialization, training or experience you may have: | <i>Dropdown</i>              |
|      |   | No Secondary Specialty       |
|      |   | Acute/critical care          |
|      |   | Administration/Management    |
|      |   | Adult health                 |
|      |   | Anesthesia                   |
|      |   | Case management              |
|      |   | Community health             |
|      |   | Family health                |

|  |  |                           |
|--|--|---------------------------|
|  |  | Geriatrics/gerontology    |
|  |  | Informatics               |
|  |  | Maternal/Womens health    |
|  |  | Medical/surgical          |
|  |  | Neonatal care             |
|  |  | Nurse Midwifery           |
|  |  | Occupational health       |
|  |  | Oncology                  |
|  |  | Palliative care           |
|  |  | Pediatrics                |
|  |  | Policy/Regulation         |
|  |  | Psychiatric mental health |
|  |  | Public health             |
|  |  | Quality improvement       |
|  |  | Rehabilitation            |
|  |  | Renal health/dialysis     |
|  |  | Student health            |
|  |  | Substance abuse           |
|  |  | Trauma                    |
|  |  | Other Specialty Area      |
|  |  |                           |
| 13b)   | If you selected "other specialty area", please provide a brief description:  | <i>Open-ended</i>         |
|  |  |                           |
| 14)  | Within the past 12 months, have you practiced, taught, volunteered or otherwise worked in a nursing related position?  | <i>Dropdown: Yes/No</i>   |
|  | <i>Please note: Answer "yes" for any nursing related activities or activities that draw on your nursing background, including administrative, educational, regulatory or other activities.</i> |                           |
|  |  |                           |
| <b>If you answered "No" to Question 14, please go to Question 36. If you answered "Yes", please continue.</b>  |  |                           |
|  |  |                           |
| 15)  | Overall, and taking into account all positions you fill, how satisfied are you with your current employment or work situation?   | <i>Dropdown</i>           |
|  |  | Very satisfied            |
|  |  | Somewhat satisfied        |
|  |  | Somewhat dissatisfied     |
|  |  | Very dissatisfied         |
|  |  |                           |
| <b>Primary Work Location</b>   |  |                           |
| <i>Question 16 through Question 22 refer to your primary place of employment, work or practice, including volunteer work. This is the place where you spend the most work hours during an average workweek, or where you spent the most weeks working in the past 12 months. These questions describe a particular work location, not an employer. Temporary or traveling workers who spend or spent a significant amount of time at a particular location should use that location as his or her primary work location. Persons who consistently work in multiple locations (e.g. temporary workers, home health, locum tenens, multi-facility rounds) should choose the location where they spent the most time or where they are based.</i> |  |                           |
|  |  |                           |
| 16)  | Please select the location of your primary place of employment, work, volunteer work or practice:  | <i>Dropdown:</i>          |

|      |   |  |
|------|---|--|
|      |   | Outside of US                            |
|      |   | Virginia Border State/DC                 |
|      |   | Other US State                           |
|      |   | List of Virginia's Cities and Counties   |
|      |   |  |
| 17a) | Approximate number of weeks at which at least some time was spent at this work location within the past twelve months (exclude vacation, medical leave, etc): | <i>Dropdown: 1 week - 52 weeks</i>       |
|      |   |  |
| 17b) | How many hours do you (or did you) work in an average workweek at this location?  | <i>Dropdown</i>                          |
|      |   | 1 to 9 hours                             |
|      |   | 10 to 19 hours                           |
|      |   | 20 to 29 hours                           |
|      |   | 30 to 39 hours                           |
|      |   | 40 to 49 hours                           |
|      |   | 50 to 59 hours                           |
|      |   | 60 to 69 hours                           |
|      |   | 70 to 79 hours                           |
|      |   | 80 or more hours                         |
|      |   |  |
| 18)  | Do you currently work at this location? If so, for how long?  | <i>Dropdown</i>                          |
|      |   | I do not currently work at this location |
|      |   | Less than 6 months                       |
|      |   | 6 months to 1 year                       |
|      |   | 1 to 2 years                             |
|      |   | 3 to 5 years                             |
|      |   | 6 to 10 years                            |
|      |   | More than 10 years                       |
|      |   |  |
| 19)  | In the average workweek at this location, roughly what percentage of your working hours were spent in the following roles:                                    | <i>Dropdown: (for each sub-question)</i> |
| 19a) | Administration or business-related matters  | None                                     |
| 19b) | Supervision or management of nursing staff  | 1% to 9%                                 |
| 19c) | Direct patient care, including patient education and coordination of care   | 10% to 19%                               |
| 19d) | Education of health professions students (including acting as preceptor)  | 20% to 29%                               |
| 19e) | Formal research   | 30% to 39%                               |
| 19f) | Other   | 50% to 59 %                              |
|      |   | 60% to 69%                               |
|      |   | 70% to 79%                               |
|      |   | 80% to 89%                               |
|      |   | 90% to 99%                               |
|      |   | 100%                                     |
|      |   |  |
| 20)  | At this location, approximately what percentage of your patients are. . . ?   | None                                     |
| 20a) | Children  | 1% to 9%                                 |
| 20b) | Adolescent  | 10% to 19%                               |
| 20c) | Adult   | 20% to 29%                               |

|      |  |   |
|------|--|---|
| 20d) | Geriatric  | 30% to 39%                                      |
|      |  | 50% to 59 %                                     |
|      |  | 60% to 69%                                      |
|      |  | 70% to 79%                                      |
|      |  | 80% to 89%                                      |
|      |  | 90% to 99%                                      |
|      |  | 100%  |
|      |  |   |
| 21a) | Please select the choice that best describes this location's organizational sector:        | <i>Dropdown</i>                                 |
|      |  | For-profit                                      |
|      |  | Non-profit                                      |
|      |  | State/local-government                          |
|      |  | US military                                     |
|      |  | Veteran's Administration                        |
|      |  | Other federal government                        |
|      |  |   |
| 21b) | Please select the choice that best describes this practice setting:                        | <i>Dropdown:</i>                                |
|      |  | Academic institution (teaching or research)     |
|      |  | Administrative association or regulatory agency |
|      |  | Community-based clinic or health center         |
|      |  | Corrections/jail                                |
|      |  | Day care  |
|      |  | Home health care                                |
|      |  | Hospice   |
|      |  | Hospital, inpatient department                  |
|      |  | Hospital, outpatient department                 |
|      |  | Insurance company, health plan                  |
|      |  | Long term care facility, nursing home           |
|      |  | Mental health facility                          |
|      |  | Occupational health site                        |
|      |  | Outpatient surgical center                      |
|      |  | Physician office                                |
|      |  | Public health agency                            |
|      |  | Rehabilitation facility                         |
|      |  | Residential facility/group home                 |
|      |  | School (providing care to students)             |
|      |  | Other practice setting                          |
|      |  |   |
| 21c) | If you selected "other practice setting" please provide a brief description:               | <i>Open-ended</i>                               |
|      |  |   |
| 22)  | Please indicate how you are (were) personally compensated for activities at this location: | <i>Dropdown</i>                                 |
|      |  | Salary  |
|      |  | Hourly wage                                     |
|      |  | Per Diem  |
|      |  | Business/contractor profits                     |
|      |  | Volunteer, unreimbursed                         |
|      |  |   |

| If you only have one practice location, please skip to question 31. If you have additional practice locations, please continue.   |   |  |
|---|---|--|
| <b>Secondary Work Location</b>  |   |  |
| Question 23 through Question 29 refer to your secondary place of employment, work or practice, including volunteer work. This is the place where you spend the second most work hours during an average workweek, or where you spent the second most weeks working in the past 12 months. These questions describe a particular work location, not an employer. Temporary or traveling workers who spend or spent a significant amount of time at a second location should use that location as his or her secondary work location. Persons with a secondary work location who also consistently work in multiple locations (e.g. temporary workers, home health, locum tenens, multi-facility rounds) should choose the location where they spent the most time or where they are based. |   |  |
| 23)   | Please select the location of your primary place of employment, work, volunteer work or practice:   | Dropdown:<br>Outside of US<br>Virginia Border State/DC<br>Other US State<br>List of Virginia's Cities and Counties   |
| 24a)  | Approximate number of weeks at which at least some time was spent at this work location within the past twelve months (exclude vacation, medical leave, etc): | Dropdown: 1 week - 52 weeks  |
| 24b)  | How many hours do you (or did you) work in an average workweek at this location?  | Dropdown<br>1 to 9 hours<br>10 to 19 hours<br>20 to 29 hours<br>30 to 39 hours<br>40 to 49 hours<br>50 to 59 hours<br>60 to 69 hours<br>70 to 79 hours<br>80 or more hours |
| 25)   | Do you currently work at this location? If so, for how long?  | Dropdown<br>I do not currently work at this location<br>Less than 6 months<br>6 months to 1 year<br>1 to 2 years<br>3 to 5 years<br>6 to 10 years<br>More than 10 years    |
| 26)   | In the average workweek at this location, roughly what percentage of your working hours were spent in the following roles:                                    | Dropdown: (for each sub-question)  |
| 26a)  | Administration or business-related matters  | None   |
| 26b)  | Supervision or management of nursing staff  | 1% to 9%   |
| 26c)  | Direct patient care, including patient education and coordination of care   | 10% to 19%   |
| 26d)  | Education of health professions students (including acting as preceptor)  | 20% to 29%   |



|      |   |   |
|------|---|---|
| 26e) | Formal research   | 30% to 39%                                      |
| 26f) | Other   | 50% to 59 %                                     |
|      |   | 60% to 69%                                      |
|      |   | 70% to 79%                                      |
|      |   | 80% to 89%                                      |
|      |   | 90% to 99%                                      |
|      |   | 100%  |
| 27)  | At this location, approximately what percentage of your patients are. . . ?         | None  |
| 27a) | Children  | 1% to 9%  |
| 27b) | Adolescent  | 10% to 19%                                      |
| 27c) | Adult   | 20% to 29%                                      |
| 27d) | Geriatric   | 30% to 39%                                      |
|      |   | 50% to 59 %                                     |
|      |   | 60% to 69%                                      |
|      |   | 70% to 79%                                      |
|      |   | 80% to 89%                                      |
|      |   | 90% to 99%                                      |
|      |   | 100%  |
| 28a) | Please select the choice that best describes this location's organizational sector: | <i>Dropdown</i>                                 |
|      |   | For-profit                                      |
|      |   | Non-profit                                      |
|      |   | State/local-government                          |
|      |   | US military                                     |
|      |   | Veteran's Administration                        |
|      |   | Other federal government                        |
| 28b) | Please select the choice that best describes this practice setting:                 | <i>Dropdown:</i>                                |
|      |   | Academic institution (teaching or research)     |
|      |   | Administrative association or regulatory agency |
|      |   | Community-based clinic or health center         |
|      |   | Corrections/jail                                |
|      |   | Day care  |
|      |   | Home health care                                |
|      |   | Hospice   |
|      |   | Hospital, inpatient department                  |
|      |   | Hospital, outpatient department                 |
|      |   | Insurance company, health plan                  |
|      |   | Long term care facility, nursing home           |
|      |   | Mental health facility                          |
|      |   | Occupational health site                        |
|      |   | Outpatient surgical center                      |
|      |   | Physician office                                |
|      |   | Public health agency                            |
|      |   | Rehabilitation facility                         |
|      |   | Residential facility/group home                 |
|      |   | School (providing care to students)             |

|      |   |                             |
|------|---|-----------------------------|
|      |   | Other practice setting      |
| 28c) | If you selected "other practice setting" please provide a brief description:                | <i>Open-ended</i>           |
| 29)  | Please indicate how you are (were) personally compensated for activities at this location:  | <i>Dropdown</i>             |
|      |   | Salary                      |
|      |   | Hourly wage                 |
|      |   | Per Diem                    |
|      |   | Business/contractor profits |
|      |   | Volunteer, unreimbursed     |
| 30)  | Average weekly hours at any additional Virginia locations in nursing in the past 12 months: | <i>Dropdown</i>             |
|      |   | None                        |
|      |   | 1 to 9 hours                |
|      |   | 10 to 19 hours              |
|      |   | 20 to 29 hours              |
|      |   | 30 to 39 hours              |
|      |   | 40 to 49 hours              |
|      |   | 50 to 59 hours              |
|      |   | 60 to 69 hours              |
|      |   | 70 to 79 hours              |
|      |   | 80 or more hours            |

**Employment Information**

*The Healthcare Workforce Data Center collects compensation information to assess the balance of supply and demand in the state and in localities, and to assist students in planning health careers and choosing specialties. Information from the questions will only be presented in the aggregate. The confidentiality of information for these and all questions is protected by law. All questions are voluntary.*

|     |  |                       |
|-----|--|-----------------------|
| 31) | What is your estimated annual personal income from nursing related activities? | <i>Dropdown:</i>      |
|     |  | Volunteer work only   |
|     |  | Less than \$20,000    |
|     |  | \$20,000-\$29,999     |
|     |  | \$30,000-\$39,999     |
|     |  | \$40,000-\$49,999     |
|     |  | \$50,000-\$59,999     |
|     |  | \$60,000-\$69,999     |
|     |  | \$70,000-\$79,999     |
|     |  | \$80,000-\$89,999     |
|     |  | \$90,000-\$99,999     |
|     |  | \$100,000-\$109,999   |
|     |  | \$110,000-\$119,999   |
|     |  | \$120,000-\$129,999   |
|     |  | \$130,000-\$139,999   |
|     |  | \$140,000-\$149,999   |
|     |  | \$150,000 or more     |
|     |  | Prefer not to respond |

|   |   |  |
|---|---|--|
| 32)   | Do you receive any of the following benefits from any current employer? | <i>Check all that apply:</i>                               |
|   |   | Paid Vacation  |
|   |   | Paid Sick Leave  |
|   |   | Paid Disability Leave                                      |
|   |   | Health Insurance   |
|   |   | Dental Insurance   |
|   |   | Stock options  |
|   |   | Retirement (401k, Pension, etc.)                           |
|   |   | Group Life Insurance                                       |
|   |   | Signing/retention bonus                                    |
|   |   | No Benefits  |
| 33)   | What is your estimated current educational debt?                        | <i>Dropdown:</i>   |
|   |   | None   |
|   |   | Less than \$10,000   |
|   |   | \$10,000-\$19,999  |
|   |   | \$20,000-\$29,999  |
|   |   | \$30,000-\$39,999  |
|   |   | \$40,000-\$49,999  |
|   |   | \$50,000-\$59,999  |
|   |   | \$60,000-\$69,999  |
|   |   | \$70,000-\$79,999  |
|   |   | \$80,000-\$89,999  |
|   |   | \$90,000-\$99,999  |
|   |   | \$100,000-\$109,999  |
|   |   | \$110,000-\$119,999  |
|   |   | \$120,000 or more  |
| 34)   | At what age do you expect to retire from nursing?                       | <i>Dropdown</i>  |
|   |   | Under age 50   |
|   |   |  |
|   |   | 75 or over   |
|   |   | I do not expect to retire                                  |
| 35)   | Within the next two years do you plan to do any of the following:       | <i>Check all that apply</i>                                |
|   |   | Retire   |
|   |   | Cease working in nursing                                   |
|   |   | Continue working in nursing, but cease working in Virginia |
|   |   | Increase patient care hours                                |
|   |   | Decrease patient care hours                                |
|   |   | Increase time spent teaching nursing                       |
|   |   | Decrease time spent teaching nursing                       |
|   |   | Pursue additional nursing education                        |
|   |   | None of the above  |
| <b>End of Questionnaire for active practitioners-Thank you! If you answered "No" to question 14, please continue.</b> |   |  |

|  |   |   |
|--|---|---|
| 36)                                    | If you did not practice, teach or otherwise work in nursing within the past twelve months, did/are you. . . ?                               | <i>Check all that apply:</i>  |
|  |   | I am retired.   |
|  |   | Work occasionally for charity/consultation/special patients?                        |
|  |   | Pursue nursing education or certifications?   |
|  |   | Pursue education not related to nursing?  |
|  |   | Work in another profession or field?  |
|  |   | Experience temporary <b>voluntary</b> unemployment (including for medical reasons)? |
|  |   | Experience temporary <b>involuntary</b> unemployment?                               |
|  |   | None of the above apply to me   |
|  |   |   |
| 37)                                    | Do you provide any volunteer, mentoring or other services within nursing in Virginia? If so, approximately how many hours in the past year? | <i>Dropdown:</i>  |
|  |   | None  |
|  |   | 1-25 hours  |
|  |   | 26-50 hours   |
|  |   | 51-75 hours   |
|  |   | 76-100 hours  |
|  |   | More than 100 hours   |
|  |   |   |
| 38)                                    | Do you expect to begin working in nursing in Virginia? If so, when?   | <i>Dropdown:</i>  |
|  |   | Not currently planning to practice/work in Virginia                                 |
|  |   | Plan to practice/work in a volunteer capacity                                       |
|  |   | Yes, within the next year   |
|  |   | Yes, within 1-2 years   |
|  |   | Yes, within 3-5 years   |
|  |   | Yes, in more than 5 years   |
|  |   | Yes, do not know when   |
|  |   |   |
| <b>End of Questionnaire-Thank you!</b> |   |   |